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U.S. Department of Agriculture

# AMERICA MORE FRUITFUL



**GREENING'S BIG NURSERIES**

**MONROE ♦ MICHIGAN**

**BORN 1850 STILL GROWING**





## *With Bud-Selection Research*

## *and Tree Performance Records*

# GREENING BLAZES THE TRAIL For More A's • Fewer Culls • Bigger Yields and Bigger Orchard Profits



Here is a practical, working scientist on the job. Roy E. Gibson, Director of Greening Research—a welcome figure among the nation's fruit growers.

The successful Dairyman knows to the pound how much butter fat each cow produces. The up-to-date stockman feeding beef cattle for market selects only those animals he knows will make weight properly. The modern poultry farm operator would not think of hatching chickens from eggs chosen at random. To him, parentage is all important and the same laws of heredity hold true in fruit tree production.

With parentage as definitely defined as the pedigreed records of the thoroughbred livestock and poultry, **Greening's "Bud-Selection Pedigreed Strains"** of fruit trees hold to the same laws of breeding from ancestry of known performance.

## WHAT "BUD-SELECTION" MEANS

Briefly, simply and non-technically, "Bud Selection" is the Greening developed practice of growing plants from buds whose growth and bearing characteristics are **known and controlled**, as the result of many, many years of painstaking testing, recording and development.

By thus controlling the inherited characteristics, it has been possible to grow trees of which it is **definitely known in advance**—before the orchardist plants them—will have every desirable characteristic for the most successful culture and production.

The trees will be healthy and vigorous, highly resistant to disease and climatic extremes, will bear younger and with larger crops of uniform fruit of the choicest size, color, shape and flavor to command best market prices.

Nearly a third of a century ago, Charles E. Greening started this program of research which is now world-famed "Greening Bud Selection" and today the benefits of this research are found in orchards in every fruit-growing section of the country. . . . benefits which have brought better orchard products to the consumer and substantially increased returns to the orchardist.

## *"True to Name" is Not Enough . . .*

## **You Need**

## **"Bud-Selection" Dependability, Certified by Tree Performance Records, to Assure Profit Quality in Trees You Plant**

A Jersey cow can be "true to name" and still not be a good producing animal, and so a tree can be true to name and yet not have **any one of the qualities necessary to produce first-grade fruit.**

"True to name" is not enough! You must get trees that go beyond that point—trees that are truly "pedigreed" trees with pedigreed records behind them, trees that have bred into them every one of the fine qualities that you **must have** today to make money as a fruit grower.

These trees must have robust health and resistance to disease. They must grow well. They must bear better crops of finer fruit—of better color and of greater size—fruit that commands best prices!

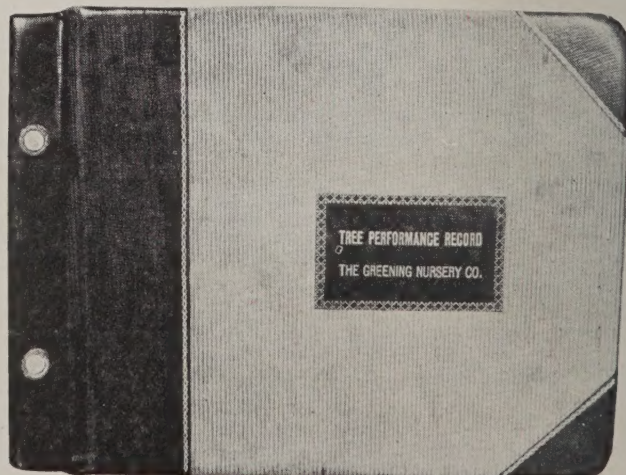
Where can you get such trees? Get "Greenings Bud-Selected" trees whose performance fruit-bearing characteristics are **known** before you even set them out! Plant "Greening's Bud-Selected" "Pedigreed Trees" and you are planting success and profit.

## **Only by Years of Ceaseless Progeny Tests and Accurate Records Is True "Bud-Selection" Possible**

On the pages of books like this are detailed records of the performances of thousands of trees—the dates they were planted, when they began to bear, how much, what kind of fruit they bore each year—the quality, color, size, shape and every other characteristic having to do with profitable yield.

These books register the history of Greening parent trees and provide the proof from whence Greening trees are given the certification of **"Registered, Pedigreed Stock."**

Without such permanent records, **"Bud Selection"** would be a farce. Being the first to recognize the commercial value of "Bud Selection" and put it to use, Greenings are 30 years ahead, thus having a third of a century advantage over common nursery practice.



**"BORN 1850 Still Growing" is More than a Battle Cry of Business**





This No. 1 Jonathan Apple Tree, Parent for "Bud-Selected" Strain, Produces the Largest Jonathan Apples Known and Nearly Three Times the Crop of Any Other Tree in the Orchard of Robert Anderson, Covert, Michigan

## Thousands of Trees Under Observation

Years of ceaseless testing and recording goes on before "Bud Selection" becomes commercially practical. This entails intensive study and research of thousands of trees, of branches, and even of tiny twigs, for the selection of the buds which appear to have the desired performance characteristics—buds from that tiny living cell which are the source of the true and consistent growth and bearing performance we are seeking.

The search goes ever on for every year through hundreds of orchards. The Director of Greening Research "carries on."

It is the duty of our Research Department to select from trees, buds for the propagation of "Greening Bud Selected" fruit trees. When in search, they find a tree, sport, branch or limb on which fruit of evident perfection grows, careful records start.

Each tree or branch is given a number, painted on the trunk. A continuous record is kept for years before propagating buds are taken. This complete record is kept on file in the Greening Record Library, a record available for inspection in our offices.

## "BUD SELECTION" Segregates, Separates and Stabilizes Orchard Production -- Controls Size, Shape, Color and Quality

Every line of effort in connection with "Greening Bud Selection" has been directed toward one all-important and all-inclusive purpose, and that is, to make scientific "Bud Selection" commercially profitable to the grower.

### BIGGER CROPS

The most prolific tree in your orchard costs no more in time, care and materials than the poorest mongrel.

Greening's Registered Pedigreed trees produce the maximum crop under any given set of soil and climatic conditions. They do it regularly and consistently, because that profitable fruiting ability is bred into them by scientific "Bud Selection."

### BETTER COLOR

Color and general appearance is an important factor in profitable fruit. Improved color is an important objective in orchard improvement that "Greening's Bud Selection" gives to you.

### EARLIER BEARING

Time is money—in the fruit growing business, more so than in practically any other business you can name. When you plant a mistake, it takes years to find it out. Trees that lag in development—that make their growth slowly—that reach their bearing age late—are expensive trees at any price.

Greening Registered Pedigreed Fruit Trees bear earlier than ordinary fruit trees.

### UNIFORM RIPENING

Every irregularity, in blossoming and ripening complicates spraying, picking and marketing activities. A week or ten days variation in time can materially affect the stability and profit margin on your crop.

Greening's Registered Pedigreed Trees are the highest development in uniform and consistent performance.

## The Curb of Virus Diseases

Fruit tree diseases have long been the bane of the orchardist. Ingrained in fruit trees, these unhealthy traits can no more be dealt with than a human physical defect inherited from a parent.

"Greening Bud Selection" forever closes the door to hereditary tree diseases. Such virus diseases as Apple measles, red suture, phony peach, little peach, peach yellow—all are transmitted through the sap of the parent tree. The only preventive of these devastating and costly diseases is positive knowledge that the parent tree is free of disease.

**MORE OF THESE** ————— **and** ————— **LESS OF THESE**



The photo at the right shows a chimera (pronounced Kí-Mé-Ráz) which in an Apple is a portion that is large and a portion that is small—or a portion which is solid in color and a portion striped.

Chimeras are mixtures—undesirable mixtures—imperfect fruit—less salable—less profitable to the fruit grower. Greening scientists study chimeras as a doctor studies his laboratory findings. Through this study we segregate and separate the undesirable qualities and characteristics. We eliminate the undesirable—we stabilize perfection. We give you fruit trees, each variety of which produces "true to form," thus more profitable fruit.

At right is a Wealthy and Giant Wealthy mixed. At left is the perfect, firm, profitable Apple, a solid Red McIntosh of clear "bud selected" quality.



It's a Victory Cry of Accomplishment



# Apples

[4]

## "BUD SELECTED"

### Wide Selection of Improved Varieties

"Bud Selection" is most important for safe, profitable investment in Apple orchards. It retains all desirable qualities of tree and fruit, preventing deterioration usually caused by budding from transitional trees mixed with undesirable variations. And, since all varieties tend to deteriorate, it is of greatest importance that propagating buds be taken from sources of KNOWN desirability. For these reasons, following lists of "GREENING BUD SELECTED" Apple trees offer you your choice of the best quality stock available, stock of KNOWN performance, and with all of the desirable characteristics that spell better crops, bigger profits.

*Name after variety is name of orchard in which parent tree is located from which propagating buds were taken*



RED DUCHESS  
Kiester Strain

## Early "Bud Selected" Strains of Summer Apples

**Anoka** (Ohio Experiment Station). An amazing new variety that generally bears fruit the second year of planting on one year wood and annually thereafter. Originated by Prof. N. E. Hanson in South Dakota, it has proven hardy in the extreme northwest cold. Fruit is sub-acid, excellent eating quality. Ripens in August but can be used for cooking a month earlier. Color yellow ground, bright red blush. Size medium to large. Tree habitually grows small, thus can be planted close. Ideal home orchard variety.

**Lodi** (Graham Experiment Station). A new Summer yellowish green Apple of the Yellow Transparent type but larger in size. Tree vigorous, productive and bears young. Flesh crisp, tender and juicy, acid in flavor. Excellent cooking variety. Season late July and early August.

**Melba** (Tree No. 633, Ohio State Experiment Station). Seedling Apple originating at the Canadian Experiment Station. Ripens about mid-August and is of practically the same quality and appearance as the McIntosh. An early Apple of high quality, particularly where roadside markets abound.

**Red Astrachan** (Springer). An attractive red Summer Apple of acid flavor. Fine color and shape. Flesh fine-grained, crisp, tender, juicy. Excellent cooking variety. Good grower, bearing rather young. Reliable cropper. Excellent for home or local market. Season late July to September.

**Red Duchess** (Kiester). Improved color strain of popular variety. The color type is solid red with indistinct stripes. The added color makes it unusually attractive and a profitable commercial variety as well as good for home use. Excellent culinary qualities. Tree unusually hardy, vigorous and a very reliable cropper. The fruit is very uniform in size and quality. Flesh yellow, firm. Slightly sub-acid and aromatic. Season, August to September.

**Sweet Bough** (Luplow). Maintains original standard of quality. Flesh tender, honey sweet. Excellent quality, large, handsome, smooth, sometimes faintly blushed. Best for home or local trade. Season, August and early September.

**Yellow Transparent** (Miller). Outstanding Yellow Summer Apple. Parent tree habitually bears good crops of large fruit annually. Fruit uniform in shape and size. Skin smooth waxy, pale greenish yellow changing to yellowish white. Flesh fine grained, crisp, tender, juicy. Fine cooking variety of the best early Summer Apples for home use and market. Season late July and August.



A Block of 2-Year Apples in the Nursery

### Three-way Dependable Grading

#### Another Factor That Makes Greening Trees Safe to Buy

When you buy Greening trees, there is no guesswork as to size and grading any more than there is to quality. You can depend upon the age, the height of the tree and the caliper or diameter of the trunk to a fraction of an inch. Therefore, your trees measure up to your expectations when you receive them—exactly the age, grade and size you purchased. This dependable factor in Greening service coupled with the extraordinary quality of Bud Selected strains plus our free replacement guarantee of any trees failing to grow first season planted, gives you assurance of profitable performance in your orchard plantings of "Greening Bud Selected" trees.

Greening's Practice is to Hold Fast to that Which is Good



## Two Outstanding Developments

### OF "GREENING BUD-SELECTED" APPLE VARIETIES

#### The New **GRAHAM SPY**

(U. S. Plant Patent No. 278)

The new Graham Spy is so outstanding in all desirable characteristics that we have patented the variety. The Apple originated in the orchard of the Manistee Orchard Company, one of the largest in Michigan, containing over 10,000 Apple trees and was named for Mr. Thomas Graham, President of the Company. It originated as a whole tree variation of Northern Spy and is similar to Northern Spy in the growth characteristics of the tree and in the size, shape and general appearance of the fruit. The Apples mature earlier in the season and should be harvested soon after McIntosh. They store well and are especially good for cooking and for pies, retaining their exquisite flavor. The color is deep crimson, both deeper and brighter than Northern Spy, and while the original strain varied from an ordinary striped type to more attractive red-striped and solid red forms, we are propagating only the more desirable solid red forms through bud selection. Attention was first called to the original tree when it produced a full crop of nine bushels when it was eleven years old.

#### The Famous **JONATHAN**

(Anderson Strain No. 1)

The characteristics of the parent tree of this strain are early bearing and heavy annual production of exceptionally large sized fruit. A check tree growing in the same orchard and a typical ordinary Jonathan tree, of equal size and growing under identical conditions and care, took two years longer to come into bearing. This check tree has produced less than one-half of the fruit that the parent tree has and the fruit has always been small which is characteristic of the Jonathan variety. Over the same period the parent tree produced  $38\frac{1}{4}$  bushels of fruit, the average of which was  $6\frac{1}{4}$  ounces, whereas the check tree produced but  $14\frac{1}{2}$  bushels and the average size being 4.72 ounces. We have corrected the only fault of the Jonathan, thereby increasing the profits of those who plant it. The color of the fruit is an attractive bright red, the flesh is white, firm, crisp, tender, juicy, aromatic and sprightly sub-acid; in all, a very beautiful Apple, highly flavored, either for dessert or culinary uses. One of the most desirable varieties for the fancy trade at holiday season.

### "Bud-Selected" Strains of Autumn Apples

**Solid Red Snow** (Farley No. 1). A solid red type of Snow, also known as Fameuse, which is completely segregated. The original parent tree produces only solid red fruits. There is no indication of striping whatsoever. This super-selected strain of Red Snow can be planted with confidence where ordinary Snows will not color satisfactorily. This is a very well and favorably known dessert Apple, beautiful in appearance. The skin is thin, tender, smooth and extremely attractive. The flesh is snow-white, very tender, juicy, sub-acid and aromatic. Season, October to mid-Winter.

### ABOUT POLLINATION

Although most varieties of Apples will produce a few fruits in most years and some varieties will likely produce a fair crop in favorable years when self pollinated—all varieties benefit by cross pollination. It is good practice therefore, to plant not more than 2 to 4 rows of one variety in a block alternating with desirable pollinating varieties.

Good results may be anticipated where any two or more of such standard commercial varieties as McIntosh, Wagener, Wealthy, Grimes, Jonathan, Steele Red, and Delicious are planted together. Duchess and Fameuse may be planted together or either one may be planted with McIntosh, Wagener, Wealthy, Grimes, or Jonathan. Northern Spy and Graham should be planted with such varieties as Grimes, Jonathan, Steele Red, or Delicious for best results although such varieties as McIntosh, Wagener, and Wealthy would make satisfactory combinations with Northern Spy in most years.



The New  
GRAHAM SPY

Be Tolerant to the New and Apply the Inflexible Yardstick to Greening Quality



*Save Time and Money by Planting*

## APPLE TREES OF PROVED PERFORMANCE

### Late "Bud-Selected" Strains of Winter Apples

**Baldwin, Scarlet** (Ruall). The fruit of this parent tree is very highly colored and much brighter in appearance than the ordinary Baldwin. The tree is spreading in growth habit, with dropping branches, indicating heavy production. The fruit is large, uniform in size and the skin is tough, smooth and very attractive. The flesh is firm, crisp and rather tender and juicy. Agreeably sub-acid. Quality is very good and the season extends from November to March or April; to May or later in cold storage.

**Baldwin** (Spencer No. 2). This remarkable strain of the Baldwin Apple is early and annual bearing. The parent tree is low spreading, pyramidal in shape. It produced four bushels of fruit when only seven years old, followed by annual crops. The total yield for the next 10 years was 150 bushels. The size of the fruit is large and the color typical of the variety. A check tree growing in the same orchard with the parent tree is a tall growing and round top tree. It came into production later than the parent tree, is a bi-annual bearer and during the same years produced only 80 bushels of Apples. It is very obvious that it would be folly to plant ordinary Baldwin when such trees as our Spencer Strain are available. Earlier, annual bearing and increased production resulting in greater profits. Season and quality of fruit same as the Ruall strain described on this page.

**Canada Red** (See **Steele's Red**).

**Cortland** (Lyman). Cortland is an improved late McIntosh. The fruits of the two varieties are similar, but those of Cortland are more oblate, average larger, and are more uniform in size; they have more color and the red is lighter and brighter and the strip and splashes are laid on differently; the taste of the Cortland can hardly be distinguished from that of McIntosh; the flesh is firmer but just as juicy; the season is several

weeks later; the Apples do not drop so readily and ship better. The buds for this Lyman Strain Cortland were taken from top-grafted trees. The scions grew very vigorously and bore when young.

**Delicious** (Lyman). A red striped strain of exceptional merit. Fruit above medium to large in size. Greenish yellow background, striped and splashed with medium dark red. Flesh crisp, juicy, tender. Flavor mild, sub-acid almost sweet. Season, November to March. (See **Solid Red Delicious**.)

**Gallia Beauty** (Ohio No. 16). A superior color variation from the Rome Beauty. Fruit has the characteristic shape and quality of the original type. The color type is solid red without stripes, and is unusually attractive. Our propagating buds came from a progeny test tree growing at the Ohio State Experiment Station, Wooster, Ohio. This variety is far more attractive, therefore, more salable and should supersede Rome Beauty in new plantings. The fruit is large, smooth, handsome, uniform in size and shape. Thick skinned, therefore, ships and keeps well. Thrives best in Ohio and Indiana, Southern Michigan and Southern New York. The tree is very vigorous, coming into bearing early with a heavy annual crop. Because of its long stems and flexible branches, the fruit remains well on the tree during high winds. Season, November to February.

**Greening** (See **Rhode Island Greening**).

**Grimes Golden** (Joehrendt). This selection was made because of the tremendous yields and the large size of the fruit produced by the parent tree. In spite of overloads, the size has always been above the average for the variety. The average Grimes Golden weighs 4½ ounces and measures 2½ inches. Fruit from this Joehrendt parent tree averages 6½ ounces and measures 3½ inches in diameter. It also bears much larger annual crops than the ordinary Grimes Golden and it is by far the finest and most profitable that has ever been introduced. The color of the fruit is a deep yellow, the flesh is yellow, very firm, tender, crisp, sub-acid and moderately juicy. It is an excellent variety for either dessert or culinary purposes. One of the best pure yellow Winter Apples and fine for the commercial as well as the home orchard. We can supply these trees in either top-grafted or low budded. Season, November to February.

**Kendall**. A new McIntosh type that is attracting attention of fruit growers because of its richened color, attractive appearance and has all the desirable characteristics of the McIntosh, but hangs to tree better. Originated by New York State Fruit Testing Cooperative Association. Season about that of McIntosh, but keeps longer. The Apples are large, trim in outline and white, fine grained flesh of McIntosh, but more spritely in flavor. Handsomely colored over entire surface with dark red and rich bloom. Tree vigorous, hardy. Season, October to February.

**McIntosh** (See **Solid Red McIntosh**).

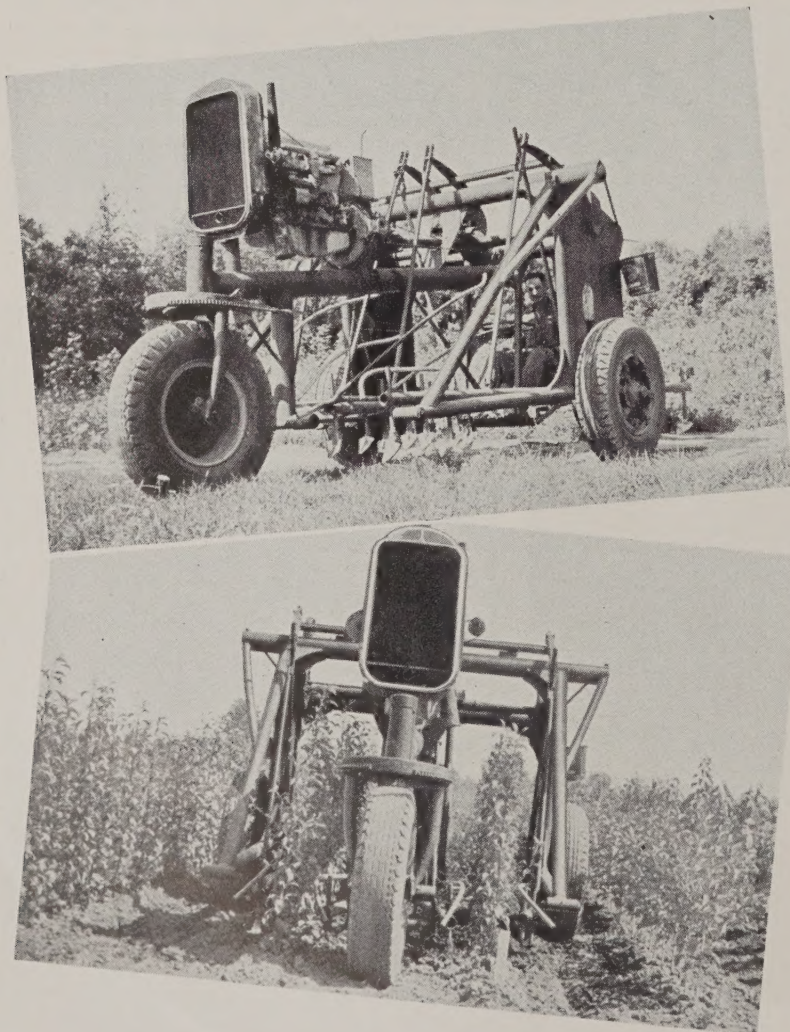
### Improvement Extended by Mechanized Production

No Greening operation can wait the ingenuity of other men. Tools and machinery are designed and made in our own research shops—a research in mechanics of nursery operation as important to quality and quantity production as our "Bud Selection."

In the development of our own equipment for our own peculiar problems, Greening men alone are responsible.

These inventions are important to you as a buyer of nursery stock, since they make it possible to do a better job in each production operation, at less cost. This means that you buy better quality of nursery stock at the lowest prices.

The machine pictured here is our Fruit Tree Cultivator, the only machine of its kind known. It is put to almost daily use during the growing season. It does its work better, safer and cuts costs. Note top illustration how operator rides close to the ground where he can see his work and guide machine to prevent injury to trees. It straddles two rows of trees even after they have reached full growth in the rows—cultivates 25 acres in 10 hours.



It Takes Years to Discover if You Planted a Mistake



**Rhode Island Greening** (Bushee). The parent tree of this strain produced annual crops beginning the second year after planting. Coupled with the unusually early bearing habit there is a very vigorous tree growth. The fruit is typical of the variety, being one of our finest green Apples. The fruit is very large, fine-grained, uniform in shape and size. For culinary purposes this variety is unsurpassed. The flesh is tender, very juicy and the flavor is rich and pleasing. Season, December to March.

**Rome Beauty** (See **Gallia Beauty**, a better, improved variety).

**Russet.** (The Genuine Old Fashioned Golden Russet.) The exquisite flavor and deliciousness of the old-fashioned Russet Apple has never been forgotten by thousands of men and women who remember this fine old variety from their childhood days. They can recall how way late in the Winter when all other fruit was gone the Russet was in its prime—how, as the Winter advanced, the Russets became more and more delicious . . . Greening's have brought back this old favorite and can now furnish the genuine old-fashioned Golden Russet of the same quality. The fruit becomes a golden brown and the fruit is picked and stored when still hard. It ripens and increases its flavor in storage keeping far into the Winter, often to the following Spring. Trees are vigorous growers and early bearers, hardy in any locality.

**Solid Red Delicious** (Evarts).

This variety is like Delicious in every respect excepting that it has added color. As the name implies, this is a solid red, highly colored Delicious. It is recommended especially for locations where Delicious does not have sufficient color. The tree is hardy, healthy, vigorous and bears regular annual crops. Flesh is fine-grained, crisp, melting and juicy. Quality is very good and the season is November to March.

**Solid Red McIntosh** (Farley

No. 5). This "Bud Selected" solid Red McIntosh is the answer to the desire of fruit growers for this popular variety in its most attractive form. Combined with added color is good production and uniformity of shape. The added attractiveness we have given this now popular variety means increased profits for the orchardist. The fruit is large, highly aromatic. Color is a solid brilliant crimson. Quality is the very best. Season, November to February.

**Solid Red McIntosh** (Smith).

This is another solid red McIntosh selection. Over one-half of the trees in this orchard produce only striped Apples. Propagating buds for this strain were taken from the other trees in which the more desirable red type predominated. In other respects this is a true type McIntosh.

**Solid Red Spy** (Stuart). The parent tree was in full bearing during the twelfth year at which our records started on this strain. This fact proves that this particular strain came into bearing very young. As the name signifies it is a solid red type. This strain colors early in the season and has an abundance of color, making it preferable for locations where Northern Spys do not color well. It is highly attractive and will create a strong demand on any market. In other respects, this is a true type Northern Spy.

**Steele's Red Top-grafted** (Sometimes called **Canada Red** or **Red Canada**). A long-keeping market Apple with excellent color. This variety is unsurpassed, brings \$1.00 to \$2.00 per barrel more than any other Apple. The fruit is well formed, very fine grained, juicy, aromatic and agreeably sub-acid. The size of fruit medium to large, shapely, uniform, cone-shaped. In color, a beautiful deep red, striped with deeper red on a background of yellow. Sometimes conspicuously marked with gray colored dots. Flesh whitish with yellow or greenish tints, firm, crisp, rather fine grained, agreeable sub-acid flavor. The quality is of the best—very valuable for commercial purposes. The only drawback to this variety has been its slow growth, but by the Greening method of top-grafting it in the nursery, on a hardy, fast growing stem and French crab root, we have completely overcome the slow growing characteristics. By top-grafting it will come into bearing as quickly as any good standard variety of Apples. Fruit growers who have planted it have been able to reap large profits and our demand for this type of tree is greatly increasing.

**Stayman's Winesap** (Coffing). This strain is a selection from the orchard of Coffing Brothers in Indiana, who are reputed to grow the finest Stayman Winesaps in the country. The tree is very productive, produces fruit uniform in size and of splendid quality. The color is greenish yellow completely covered with dull mixed red and indistinctly splashed with carmine, red prevailing. Flesh slightly greenish tinged with yellow, moderately fine grained, tender, moderately crisp, juicy, aromatic and mildly sub-acid. Tree is vigorous grower coming into bearing early, a reliable cropper. Season, Dec. to May.

**Tolman Sweet** (Wark). Best late keeping sweet Apple. Large, vigorous, hardy trees. Fruit medium in size, pale yellow, usually marked with one or more narrow green stripes. Firm flesh, fine grained, juicy and sweet. Season, December to February.

**Turley (Turley Winesap)** (Coffing Bros.). The Turley is gradually winning its way solely on its merits. The variety originated in Indiana and is much esteemed by the growers of that state as a commercial Apple. The tree is vigorous and bears fruit early—in 5 or 6 years from date of planting. The fruit is very red and inclined to be large. Season just before Stayman's Winesap.

**Wagener** (Wark). This selection is typical of the variety and fully up to original standards. Comes into bearing earlier than most varieties. Tree dwarf to medium size in growth. Valuable variety as a filler in commercial orchards. Fruit medium to rather large, color pinkish red, striped with carmine over a pale yellow background; prevailing color light red. Flesh white, fine grained, tender and very juicy, sub-acid. Quality is very good. Season, October to February.

**Wealthy** (Nye No. 2). The parent tree of this strain maintains a high standard for the variety. It began to bear at an early age and produced good annual crops of large, uniform Apples with normal color for Wealthy. In Wealthy orchards, undesirable variations affecting production, uniformity of shape and size and also undercolored fruits are very common. Fruit large size, roundish. Skin is smooth, marked with dark red. Flesh white, tender, juicy and sub-acid. This is one of the finest varieties of its season and is especially good for commercial purposes as it comes into bearing early. Very profitable as a market Apple on account of handsome appearance and good flavor. Season, Nov. to Jan.

**Wolf River** (Wark No. 4). This selection represents a high average with heavy production of very large apples, one of the largest Apples grown. Smooth, yellowish white, splashed with bright red. Flesh yellowish white, coarse, tender. Flavor medium. Exceedingly valuable as a baking Apple. Grown especially for the restaurant market. Tree very vigorous and in this selection we offer trees capable of heavy production whereas the ordinary Wolf Rivers are considered only fairly productive. Season, November to January.

**Yellow Delicious** (Farnsworth). An extraordinary "Bud Selected" development of yellow Apple of Delicious type. Has all characteristics of regular Delicious in flesh and flavor. Good commercially where yellow Apples are favored and excellent for home and local markets. Season, November to February.

## CRAB APPLES

Crab Apples succeed equally well in all sections. Excellent for preserving, jelly and cider. A valuable market fruit.

**Hyslop** (Smith No. 1). The best of Crab Apples. This parent tree combines in one the money-making qualities of the variety with improved color; vigorous, early bearing, heavy annual production, large size fruit and a solid red color type. Only 20 ft. away from this parent tree stands a tree of the striped type. Nine years records of the parent tree show a production of 59¾ bushels, the fruit averaging 1⅞ ozs. These figures need no further comment as to the superiority of this high type Super-Selected Strain of Hyslop Crab. Season, September to October.

### Number of Apple Trees Required per Acre

Distance apart—40x40 feet.....	Number per acre—	27
Distance apart—36x36 feet.....	Number per acre—	33
Distance apart—20x20 feet.....	Number per acre—	108

## NORTHERN SPY

(Farley No. 9)

One of our outstanding achievements in bud selection. This remarkable parent tree is a combination of the following factors which we wish to reproduce in Northern Spy orchards, a strong, vigorous tree, early bearing, heavy annual production, large size in fruit and an attractive typical striped color type. This parent tree produced a full crop of nearly twelve bushels when only nine years old and a total of 141 bushels by the end of the sixteenth season. The fact that this tree produced twelve bushels when only nine years old, shows that it must have come into bearing at not more than six years after planting for a Spy tree always bears a few Apples the first year and continues to increase in production each year. This record speaks for itself. It requires no added comments. The fruit is large and extremely attractive. Color, bright red with indistinct stripings. Flesh, very juicy, crisp and tender and most excellent for either dessert or culinary use. Season November to March. See also Solid Red Spy.

Plant "Bud Selected" Trees with Recorded Performance and Play Safe





# Peaches

*The Quick-Profit Fruit  
Crop—Made More  
Profitable with*  
**“BUD-SELECTED”  
STRAINS**

Because Peaches come into bearing in three years, they are the quickest of all orchard trees to bear profitable crops. And because more trees can be planted per acre, the largest cash returns per acre can be expected. Used as fillers—set between permanent Apple trees—Peaches bring a quick profit from the orchard until the Apples come into bearing.

As in other fruits, Greenings Bud Selection has played a star role in producing big profits from Peach orchards by improving varieties—maintaining standards—eliminating virus diseases and making available new varieties with merits of greater profit.

Varieties following offer a wide range of the best varieties of the ripening season—a choice of exclusive Bud Selected strains, proven by progeny tests and by successful Peach growers as the leaders of the kind.

*The name in parenthesis following variety name is the name of the orchard from which propagating buds are taken from the parent tree.*



*New*

## EARLY HALEHAVEN

(U. S. Plant Patent No. 325)

A direct sport of the famous Halehaven which was originated by Mr. Stanley E. Johnson of the South Haven Experiment Station. This Early Halehaven limb sport is identical in size, quality, flavor, production, hardiness, to its mother parent Peach tree, but ripens a week to 10 days earlier.

The blood lines of the New Early Halehaven originated in the South Haven Peach tree which the Greening Nurseries discovered and introduced to the American Fruit Growing Industry. The South Haven is the half parent of the Halehaven (South Haven x J. H. Hale). For the earlier market we know of nothing that even approaches this remarkable new variety in its season. Because it ripens 10 days earlier than the Hale-Haven it comes on the market when prices are most advantageous. The good fruit grower will plant this variety in reasonable quantities in his future plantings.

**Arp Beauty** (South Haven Experiment Station). The Arp Beauty Peach was originated by G. P. Orr, Arp, Texas, about 1897. The variety has been tested in a number of experimental stations, including Michigan, where it ranks as one of the earliest yellow Peaches. The fruit is semi-cling and medium to large in size. The color is bright, attractive red and yellow. The flesh is clear yellow in color, fine grained and firm for an early Peach. Time of ripening is five or six weeks before Elberta. The quality is good, especially for slicing and the variety is recommended for roadside stand, local and truck trade. Trees are hardy and very productive when interplanted. Blossoms are self-fertile.

**Big Red** (See **Shippers Late Red**).

**Champion** (Warner No. 1). A white-fleshed Peach, very excellent in quality; attractive fruit, large. Creamy white, tender flesh, very pleasant flavor, having a peculiar honey taste. Stone semi-free to free. Ripens three weeks before Elberta.

**Cumberland**. A splendid white Peach of excellent commercial value in localities where white Peaches are popular. Fruit is above medium in size, attractive in color and shape and good in quality and practically freestone. Ripens about 25 days before Elberta.

**Early Elberta** (Eagle Point Farm). A bud selected strain of yellow freestone Peach—similar to standard Elberta, except that it ripens about a week earlier and is somewhat smaller in size. Flesh lemon color with rich flavor.

**Elberta** (Barden No. 2). This is the aristocrat of Elbertas. It is a true Elberta, prolific of yield and ideally suitable for shipping, but it has far better color than its predecessor and, through bud selection, we have reduced variation in the yield to a minimum. This parent tree at 10 years of age measured 30 ft. across; it produces from 6 to 10 bushels of large size Elbertas each year and is absolutely free from Peach disease. This strain is the last word in high type Elbertas. The fruit is large, color orange yellow, overspread with red. Flesh yellow, stained with red near the pit, juicy, firm but tender, sweet or sub-acid, mild. Stonefree. Period of ripening varies with season. September 10th to 20th.

**Fertile Hale** (See page 9).

To Match Greening's Experience Would Take a Generation



**PEACHES—Continued**

**Gage-Elberta** (Gage and Hawkins). Gage Elberta, as the name implies, is a true Elberta type, but this strain originated as a bud sport from an Elberta in the orchard of John Gage, Texico, Ill. The feature of the strain is its resistance to bacteria infections. Seasons when Elberta and J. H. Hale are nearly defoliated and the Peaches badly injured the Gage trees show a marked contrast with their dark green foliage, practically free from disease. The tree grows low, very spreading due to wide angle formation scaffold branches. Trees unusually strong and do not break with heavy loads of fruit. Fruit ripens about 4 days later than Elberta.

**Gold Drop** (Goodrich). Remarkably productive and hardy. This tree bears so heavily that the fruit will average small unless the tree be heavily pruned, thinned of the young fruit and fertilized. This tends to throw more vitality into the remaining fruit. Many of our leading commercial varieties have a tendency to overbear, which is really an asset and not a serious fault. Medium in size, rounding, oval with unequal halves, bulged at one side. Cavity deep and abrupt. Pleasantly and sprightly flavored, excellent in quality. Freestone. Gold Drop should be in every commercial as well as home orchard. Ripens one week after Elberta.

**Golden Jubilee.** Of the many Peaches originated by the New Jersey Experiment Station, none have aroused the interest of fruit growers, as has the Golden Jubilee. It is a large early yellow Peach of the Elberta type and is an extremely popular early yellow Peach. It ripens about 3 weeks before Elberta and resembles Elberta in tree habits and fruit. The skin is yellow blushed with red, flesh yellow, juicy, tender, sweet; freestone.

**Halehaven** (South Haven Experiment Station). This marvelous new Peach was introduced through the efforts of the Michigan State Experiment Station, South Haven, Michigan. It is a cross between the famous varieties, South Haven and J. H. Hale. A large, beautifully colored, yellow fleshed Peach, ripening approximately 2 weeks before Elberta. A perfect freestone, strong, thrifty grower, a good shipper and an extremely hardy, heavy bearer of exceptionally fine flavor. The Hale-Haven produced full crops when crops of many other standard varieties were a failure due to low temperatures the previous Winter.

**Howard Fisher** (Dulverton Fruit Farm, U. S. Plant Pat. No. 233). Large, yellow flesh, freestone Peach, sport of Valiant but ripening three weeks earlier or about six weeks earlier than Elberta. Has dark red blush covering nearly half of surface and has same excellent flavor and fine grained flesh of parent. Fruit holds to tree when fully ripe. Excellent canning variety as it has no red around pit.

**J. H. Hale** (Warner No. 4). This high type Super-Selected Strain of J. H. Hale is the finest to be obtained. The long Elberta shape type of J. H. Hale is mixed largely in plantings of J. H. Hale, which is very undesirable. Through bud selection we have produced a strain of J. H. Hale which will produce the typical large, round type of fruit desired in this variety. This Warner parent tree produced three bushels of typical large, round type Hales when it was only 3 years old. Young orchards of the Warner strain have reproduced this most desired type. The Sun-Glo is recommended as a pollinizer for Warner strain J. H. Hale.

## Peaches in Their Ripening Order

Ripening dates vary from year to year depending on climatic and weather conditions. In normal season the ripening date of Elberta is September 10th to 20th in Michigan and nearby areas. Elberta is listed a standard and ripening of other Peaches is estimated from the ripening of this variety. As you will note Greening varieties extend throughout the entire season.

### Before Elberta

Howard Fisher.....	42 days
Arp Beauty.....	42 days
Red Haven.....	30 days
Oriole.....	29 days
Early Halehaven.....	27 days
Cumberland.....	25 days
Golden Jubilee.....	24 days
Champion.....	21 days
Rochester.....	21 days
Halehaven.....	17 days
Sun-Glo.....	17 days
Valiant.....	17 days
Early Elberta.....	7 days
Kalhaven.....	7 days
J. H. Hale.....	3 days
Elberta.....	Ripens Sept. 10 to 20
Sunday Elberta.....	Ripens with Elberta

### After Elberta

Fertile Hale.....	4 days
Gage Elberta.....	4 days
Gold Drop.....	7 days
Wilma.....	7 days
Shippers Late Red.....	10 days
Salberta.....	14 days

# The FERTILE HALE

## Developed by Bud Selection

(U. S. Plant Patent No. 175)

The "Fertile Hale" is the outstanding "money-Peach" of the Peach family.

This new Greening introduction, as the name implies, is a Hale-type Peach which is self-fertile. It does not require cross-pollination with other varieties. Fruit growers everywhere have been asking for a Hale-type Peach that would produce heavy, profitable crops and Greenings have answered the call by producing through "Bud Selection" the Fertile Hale.

Its ripening dovetails with the last of the Elbertas. The trees are far more vigorous, it is more hardy in bud than the J. H. Hale or the Elberta, and produces crops in season when J. H. Hale or Elbertas fail.

The Fertile Hale, as market quotations prove, is unquestionably the outstanding profit producer of Peach varieties, bringing 25c. to 50c. more per bushel than the Elberta. Every factor which contributes to profit in Peaches is found in this marvelous new variety. It is commandingly attractive in appearance. Its color is yellow with a deep carmine blush and has excellent shipping qualities.

More dollars per acre is a certainty by planting the Fertile Hale.



FERTILE  
HALE

(Pat. No 175.)

It's Folly to Feed Boarder Trees—"Bud Selection" Breeds Producers



## The New SUNDAY ELBERTA

(U. S. Plant Patent No. 418)

### A WONDERFUL NEW HARDY STRAIN

In seasons when Elberta froze in bud this new hardy strain has produced profitable crops.

It is a seedling origination in orchard of Geo. P. Sunday, Baroda, Michigan, showing exceptional hardiness in bud, surpassing any variety of the season. Blossoms self-fertile assuring productiveness. Fruit large, smooth with little fuzz. Color attractive bright yellow and red. Flesh firm, orange yellow with pleasing flavor. Freestone, small pit. Good shipper and holds in storage. Ripens with Elberta or few days later.

### PEACHES—Continued

**Kalhaven** (South Haven Experiment Station). A cross between the J. H. Hale and Kalamazoo. Tree medium to large, productive and apparently considerably above average in hardiness. Blossoms are self-fertile. Fruit of this variety are medium to large, rather longer than round. The ground color is rich yellow overspread with deep red. Skin rather thick and tough, resulting in good shipping qualities. Flesh fine textured, somewhat red at the pit. Perfect freestone. Ripens seven days before Elberta.

**New Red Haven** (South Haven Experiment Station). An exceptional early variety. Originated at the South Haven Experiment Station from a cross between Halehaven and Kalhaven. Trees above average in vigor. Examinations of fruit buds following severe cold Winters show that it withstood injury to buds as well as Sun-Glo, which is considered one of the hardiest of Peaches. Trees bear young and require thinning to insure size. Blossoms are self-fertile. The fruits ripen about a month before Elberta. Medium in size, slightly elongated in shape, and usually almost completely covered with a brilliant red color. Where the ground color shows it is bright yellow. The skin is smooth and tough. The flesh is firm, fine-textured, moderately sweet in flavor and of good quality. Freestone.

**Oriole** (South Haven Experiment Station). An early maturing variety. The tree is vigorous and hardy. An early bearer, and consistent producer. The fruit is medium in size. Due to its inclination to bear heavily it must be well thinned. The shape is somewhat round. Attractive in appearance, having a plentiful supply of red coloring, with enough yellow for contrast. The flesh is yellow, fine grained, juicy, and of excellent quality. The pit is tree. Splendid for local markets and short shipments. Ripens approximately one week before Rochester, or about 4 weeks before Elberta.

**Rochester** (Green). A yellow freestone Peach ripening about August 10th; extraordinarily sweet and early bearing. In other respects it compares favorably with the best standard varieties. Fruit is large, yellow in color, prettily blushed. Flesh sweet, juicy and of delicious flavor. It keeps and ships well. Tree a vigorous grower, hardy and an annual bearer.

**Salberta** (Rofgar). A late ripening yellow Peach. Size medium to large nearly round. Color deep yellow with dull red cheek. Flesh yellow, firm and very juicy. Ripens two weeks after Elberta in Northern Ohio.

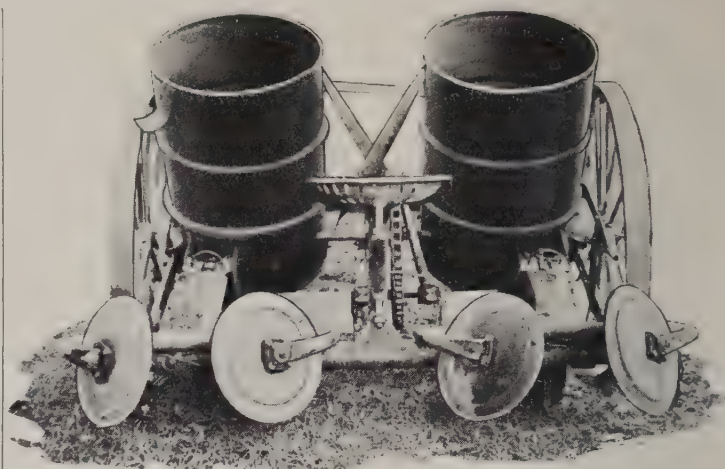
**Shippers Late Red (Big Red)**. (Strau.) The fruit is a perfect freestone, oblong, larger than Elberta; skin is fine golden yellow, almost completely covered with a splendid rich red making the well ripened fruit on the tree appear as if it were solid red all over. Excellent shipping quality; flesh rich yellow, moderately fine grained (no fiber), juicy and of good quality; ripens about one week to ten days after Elberta. A large, spreading tree and a heavy annual bearer. Should not be planted closer than 25 ft.

### 175 Peaches on Tree Out Two Years

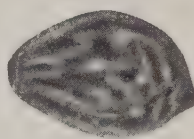
Greening Nursery Company  
Monroe, Michigan

I have one of the finest orchards in our country. My trees have been out two years and the Peach trees have from 75 to 175 peaches on a tree. Of course, I have been picking most of them off. I didn't think it would hurt the tree as the soil is rich and I have taken extra care of the orchard. I have been more than satisfied with all of my trees from your nursery.

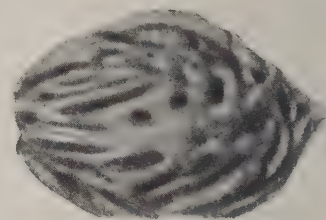
NORMAN PATON, Howell, Mich.



Peach Pit Planter



Wild Peach Pit  
No. 1



Cannery Pit No. 2

### Another Reason for Greening's Super-Quality Trees

#### PEACH PIT PLANTER

Another one of Greenings own inventions to improve quality, make possible enormous production of Peach trees. Plants 560,000 pits per day. We plant only the small, wild, natural pits (1). They have been found to be free from Peach Yellows, Little Peach, X Disease, Phony Peach, Red Suture and other virus diseases. That marked (2) is a domestic or "cannery" pit, more apt to carry disease. Greening "Bud-Selection" by grafting on these disease-free seedlings is just one more safeguard to the grower!

**South Haven.** See **Sun-Glo** which is our bud selected South Haven.

**Sun-Glo** (Greening's Improved Bud Selected South Haven). A prolific bearer of fruit of large size, excellent flavor and quality. The celebrated South Haven Peach was an exclusive Greening achievement. In the Sun-Glo you have the South Haven at its Super-Selected best, being the second generation of a Greening Super-Selected South Haven. Sun-Glo, the hardiest of all commercial Peaches, is a consistent cropper, producing a full crop of marvelous fruit in seasons when crops of other varieties are destroyed by frost. The Sun-Glo Peach and its parent the South Haven, have been the leading money-making commercial Peaches since their introduction by us. The fruit is large, roundish, thick skinned, very uniform in size. Color deep yellow with red cheek. Stone is free. Ripens approximately 18 days before Elberta at a time to bring high market prices.

**Valiant** (Geneva). An excellent quality Peach both in fresh fruit and as a canned Peach. Especially popular in Ontario and New York fruit districts. Fruit is medium to large. Dark cheek, flesh yellow, fine and juicy. Flavor sub-acid. Ripens 17 days before Elberta. Tree vigorous and healthy.

**Wilma** (Wichel). A real Elberta in tree and fruit, but ripens one week later. This variety was discovered by Wm. Rofgar of Catawba Island, Ohio. It was selected from several hundred seedlings of Elberta and named after his daughter. The variety has steadily increased in popularity on its own merits.

#### Number of Peach trees per acre

Distance Apart	No. per Acre
20x20 feet.....	108
18x18 feet.....	134

The Risk of Defective Yields is Eliminated by "Bud Selection"



# Pears

*More Productive, More Profitable  
as a Result of Greening's  
"BUD-SELECTION"*

Here is one of the most dependable sellers in American fruits. The Pear thrives most anywhere, although it does best in heavy clay and clay loams. But, American housewives "know their Pears" and discriminate in purchase. Therefore, only the better varieties, as developed through Bud Selection, assure maximum success and profit. They are choicer, juicier, better shaped, richer in color and flavor and win higher prices, quicker sale. With a long ripening and selling season, Pears offer you a greater money-making opportunity.

## "GREENING BUD-SELECTED" STRAINS Summer Pears

**Bartlett (Nichol).** See page 12.

**Clapp's Favorite (Nye No. 5).** This selection is an annual bearer of large sized fruit. The production of this strain is very good and it maintains a satisfactory standard for the variety. A large, fine Pear, resembling the Bartlett, but without its musky flavor, pale lemon yellow, with red cheek, fine texture, melting, buttery, juicy, with a rich, sweet, delicate vinous flavor. Tree hardy and very productive; very desirable in all sections, especially where other varieties fail. August.

**Gorham (New York Experiment Station).** A new late Bartlett Pear ripening late Summer about two weeks after Bartlett, but keeps a month longer. The tree is vigorous, hardy, and resistant to blight. Good pollinizer. Fruit resembles Bartlett in shape, color, and size. Flavor sweet and aromatic. Flesh white and tender, buttery and juicy, a combination which with its rich flavor and spicy aroma makes it one of the favored Pears of the season. Recommended for eating out of hand, for cooking and for market. Plant to follow Bartlett.

## "GREENING BUD-SELECTED" STRAINS

### Autumn Pears

**Angouleme (Duchess d'Angouleme)** (Brown). Very large; greenish yellow, some times a little russeted; makes a beautiful tree; very productive. One of the best. October and November. Succeeds best as a dwarf.

**Anjou (Brown).** The standard market Pear for late Fall and early Winter. Fruit large, skin yellow dotted with russet, has faint blush. Flesh is yellowish white, firm but tender. Very juicy, sweet and spicy with a rich vinous flavor. One of the very best. Season, October to December.

#### Number of Pear Trees Required per Acre

18x18 ft. apart. ....	134 per acre
20x20 ft. apart. ....	108 per acre
24x24 ft. apart. ....	75 per acre



Above is an illustration which shows the necessity for Bud Selection. Pictured are Pears from one limb showing marked variation in color and shape. One can see what would happen if trees were grown from buds cut indiscriminately from such a branch. Only by careful, long, ceaseless observation progeny testing and recording can true quality and profitable strains be assured and final stability of the true characteristics of strains for which it acquires its commercial value be guaranteed. Assured quality, true to performance are the trees you buy in Greening trees

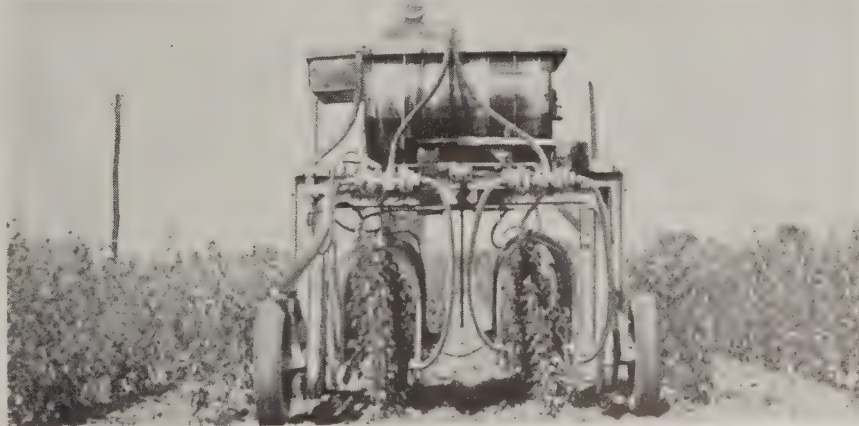
#### AUTUMN PEARS—Continued

**Conference (South Haven Experiment Station).** This variety was recently imported from England where it is much esteemed as one of their finest fruits. The Conference Pear in England is what the Bartlett Pear is in the United States. It is medium to large size, averaging 3½ in. in length, 2½ in. in diameter, beautiful cone shape, greenish yellow, with russet markings; flesh white, with just a suggestion of pink, fine grain, very juicy, has a very rich flavor. In cold storage they keep until Christmas or after; in a common cellar until the first of November. This variety is recommended as an effective pollinizer for Bartlett.

**Flemish Beauty.** A highly flavored Pear, large and beautiful, strong grower and good bearer and a popular market variety. Fruit subject to skin scab, which is easily controlled in the commercial orchard. Season September to October. Recommended as an effective pollinizer for Bartlett.

## Innovation in Tree Production—TREE SPRAYER

Designed and Built in Our Own Research Machine Shops



Not just a sprinkling of spray material, but an actual "bath" of the fruit trees while traveling on its own power down the nursery rows. Note the slots where the machine travels through the row. The sprayers are inside of the hood and as the machine passes through the rows the trees are literally submerged by spray material. Through a special device, the surplus spray material is not thrown to the winds but drops into small troughs at the base of the hoods and is then pumped back, screened, and again returned to the supply tank for use, thus reducing spraying costs to one-third of the ordinary open air spray method. Covers 30 acres per day.

It's Patriotic to Make "America More Fruitful"



## AUTUMN PEARS—Continued

**Seckel** (Gooding No. 2). This selection was made to insure large size fruit for the variety. In addition to this, the parent tree began to bear annual crops when 3 yrs. old, which is very uncommon for this variety. In quality it cannot be surpassed by any kind of fruit. Tree is very vigorous, productive and quite immune to blight. Fruit is very highly colored and in this strain is larger than ordinary Seckel and very symmetrical. Flesh, very juicy, fine grained and very delicately flavored. Fruit reddish brown color. Season, September to October.

### "GREENING BUD-SELECTED" STRAINS Winter Pears

**Bosc** (Gooding). This is a selection which is true to the type of the variety. The Bosc Pear originated in Belgium. Shape oblate-pyriform and of very large size. In color it is a beautiful yellow, touched with crimson and slightly russeted. It is undisputed as the most delicious dessert Pear known. A medium late variety. The tree, however, is a poor grower, but under our method of double grafting we have restored it to a strong, thrifty, productive tree. This variety always sells at the highest prices on the market. Recommended as a desirable pollenizer for Bartlett.

**Campus** (South Haven Experiment Station). A new Winter variety originating from seedling found by U. S. Dept. of Agriculture. Same type as Kieffer, blight resisting. Fruit medium size, color yellow flecked with russet. Flesh firm. Excellent flavor when canned. Season very late.

*In the description of varieties, the name in parenthesis immediately following the variety name, in each case indicates the strain and is the name of the orchard in which the parent tree is located, from which propagating buds were taken.*



The Greening Bartlett

## The Greening BARTLETT

(Nichol Strain No. 1)

### The Finest of Bartlett Pears

This variety being of paramount importance in Pear growing, we have concentrated our efforts on it. Tree performance records were started in 1917, and the final selection was not made until the season of 1928. Our records were taken in thirteen different orchards with a total of over 3,000 Bartlett trees under observation. Emphasis was placed on three points of comparison: Production, size and shape of fruit. The object being to maintain good production and to eliminate an undesirable variation known to Pear growers as "little green Bartlett," "round" or Kieffer-shaped Bartlett. Since the discovery of size chimeras in Apples we have also found them in Bartlett Pear trees. This proves that two distinct size types are present in the orchards. The typical large Bartlett-shaped strain is mixed with the small round type in much the same manner as solid red and striped color types are mixed in McIntosh Apple orchards and the green and yellow color types are mixed in Bartlett transitional tree growing at the Experiment Station grounds at the Michigan State College. Through the courtesy of the United States Department of Agriculture Experiment Station we tested the following variation in Bartlett Pears: Flattened fruit, Russet fruit, small Russet fruit, Striped fruit, Corrugated fruit, Gray brown russet fruit and Flattened lobed, goose-necked fruits. These are being tested in addition to the russet color variations which we have located in Michigan. We are calling your attention to these variations to show that undesirable variations are not uncommon and to emphasize the need of keeping the varieties up to a high standard. After many years of concentrated research we offer this Nichol Strain Bartlett Pear which possesses the desired characteristics of the variety with the elimination of the undesirable. The trees are vigorous, prolific producers of fine Bartlett pears that will run true to form in shape and color and bring the highest prices on the market. The fruit is of large size, yellow, often with beautiful blush next to the sun. Buttery, very juicy and highly flavored. The trees bear early and abundantly. Season, last of August and first of September.

### Important

Bartlett Pears should never be planted alone or in solid blocks, since they are not self pollenizing, but should be mixed with another variety that will furnish pollen. We recommend the Bosc, Flemish Beauty and Conference as desirable pollenizers for the Bartlett.

THE BOSCO  
PEAR

Years of Progeny Tests Prove the Merit of any Greening Introduction



# Plums

## APRICOTS QUINCES

### Money Crops with Greening

#### "BUD-SELECTED"

### Strains

The demand for new varieties of healthful breakfast, dessert and salad fruits has stimulated Prune, Plum, Quince and Apricot sales substantially. Unfamiliarity with these fruits has prevented many from profiting from them, although simple, easy to handle with ordinary culture. The Quince, for instance, bears for 40 years, handles easily in shipping and is a fine "standby" in homes everywhere. An outstanding, dependable "Bud Selected" Quince variety is described on the next page. Plant Plums in rich, heavy, fertile soil, well drained.

## American and European PLUMS

**Austrian Prune** (April). Tree very vigorous, upright, perfectly hardy and is a young bearer and very prolific. The fruit of this Plum is the handsomest and largest in cultivation. The color is an attractive, dark reddish purple. Flesh golden yellow, sweet and mild. Excellent quality. A good shipper and keeper. Ripens about the middle of September. Takes highest honors and premiums everywhere.

**Albion Prune** (Geneva). The latest ripening good Plum grown at Geneva. It belongs to the Grand Duke type, but its fruits are larger and better in quality. The tree is productive, strong and vigorous. All in all, Albion is one of the most remarkable new Plums produced in many years.

**Grand Duke** (Wade). The favored late shipping Plum because of its very large size and beautiful color, being of a purple shade. Flesh very firm and meaty. A regular annual and abundant cropper. Usually free from rot and hang in good condition a long time. This strain maintains a high standard for this leading commercial variety.

**Green Gage**. See Reine Claude, a far better variety of the same type.

**Italian Prune** (Fellenberg) (Farnsworth). A fine late Plum; undoubtedly the leading commercial prune variety; oval, purple; flesh juicy and delicious, parts from the stone; fine for drying. September.

**Monarch** (Luplow No. 2). One of the most valuable of the late introductions from England. Tree robust with dense foliage; an abundant bearer. Fruit very large, roundish oval; dark purple-blue; perfect freestone.

**Reine Claude** (Barden). Surpassing in quality and richness of flavor nearly all varieties listed. Fruit large, greenish yellow; flavor excellent. Season, September. The best of the Gage variety.

**Shropshire Damson** (Nye No. 3). The orchard containing this parent tree was set in 1912 and our records started in 1919. The parent tree of this strain was chosen because of early bearing and heavy annual production. This strain represents the very highest type for the variety. Fruit small, oval in shape; skin purple, covered with blue bloom; flesh melting and juicy, rather tart, separates partly from the stone. September.



Stanley Prune

## *The New Famous* **STANLEY PRUNE** (Geneva Experiment Station)

Although a comparatively new variety, no Plum nor Prune ever reached such quick prominence as the Stanley. In a few short years it has become a leading profit fruit entirely on its merits. It is a development of the Geneva, New York, Experiment Station by a cross between the Grand Duke from which it inherits its large size and firm meaty flesh and the Agen where it obtains its exquisite flavor.

Its extraordinary size, annual productiveness of trees, hardiness and disease resistant features make it a money maker supreme. Considered the ace of Prune varieties; excels for cooking or for dessert. The fruit is large in size, dark blue in color, with attractive, thick bloom. Flesh is golden-greenish yellow, juicy, firm, sweet and pleasant to taste. Stone free. Ripens in midseason.



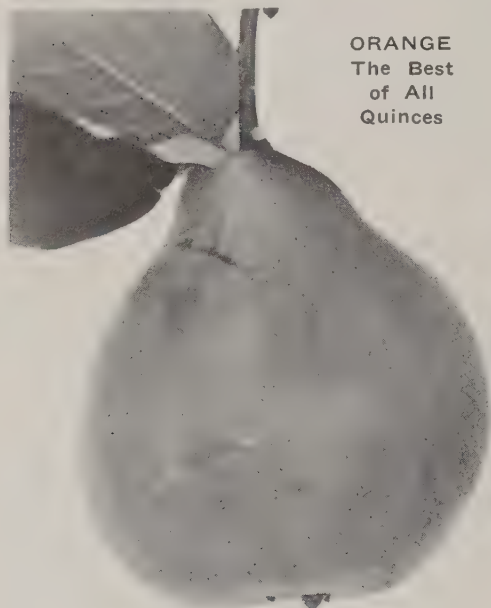
## JAPANESE PLUMS

**Abundance** (Billing). This variety is especially valuable as a pollinizer for Burbank. Medium to large in size. Oblong, amber, nearly covered with bright red and over-spread with a thick bloom. Flesh orange yellow, juicy, melting and of a delicious sweetness. Small, Freestone. Tree is a strong grower and an early and profuse bearer. Valuable for canning and market. August.

**Burbank** (Luplow). One of the best of the celebrated Japanese varieties. Remarkably successful and all over the country. Perfectly hardy. Succeeds in any soil. Abundant yearly bearer. Fruit large, roundish, dark red or purplish with thin lilac bloom; flesh amber yellow with rich, sugary flavor; small stone; bears second year after planting. First to middle of August to September. Should be inter-planted with Abundance to insure proper pollination.

### Number of Plum trees required per acre

20x20 ft. apart—108 per acre    24x24 ft. apart—75 per acre



ORANGE  
The Best  
of All  
Quinces

## QUINCES

While not planted extensively Quinces should be included in every orchard, large and small. The trees are permanently productive and profitable, bear for 40 years and more. The fruit handles easily in shipping—stores well. For canning by scores of recipes, preserving and jelly making, the Quince stands alone in merit. Greenings offer you below, the outstanding variety of this fruit—a “bud selected” strain which is completely dependable.

**Orange.** Large, roundish, bright golden yellow; cooks tender and is of very excellent flavor. Valuable for preserves or flavoring; very productive. The most popular and extensively cultivated of the old varieties. October.

We plant millions of trees and seeds each year, and harvest millions of young trees. Producing trees of Greening quality by ordinary methods would result in having to charge much higher prices. But by mechanizing our methods, using specially designed machinery and equipment, developed for Greening by Greening engineering division, we effect tremendous economies. Pictured here is but one of Greenings ingenious devices which means better trees for less money. Other machines of equal importance are shown elsewhere in this catalog.

## APRICOTS

As in other fruits, Greening's “Bud Selection” has produced Apricots of unusual merit. Hardy, vigorous, productive trees—bearing fruit with characteristics which mean profit to growers. Three of the best varieties are offered. Apricots are like Peaches in cultural requirements and prefer high, light soil.

**Alexander.** An immense bearer. Fruit orange-yellow, oblong flecked with red; sweet, juicy, very beautiful. Season July.

**Lamale.** A new Apricot originated in Monroe County. Exceptionally large and juicy with firm skin and golden yellow flesh. Freestone. A good bearer—attractive appearance. Usually blooms sufficiently late to miss frosts. Ripens about one week later than Montgamet. Rather late in season. Excellent commercial variety. Good shipper.

**Montgamet.** One of the best varieties for canning and preserving. Fruit averages small in size but excellent quality. Color deep yellow. Flesh firm, rather tart flavor and reddish color. Freestone. Ripens early in season.

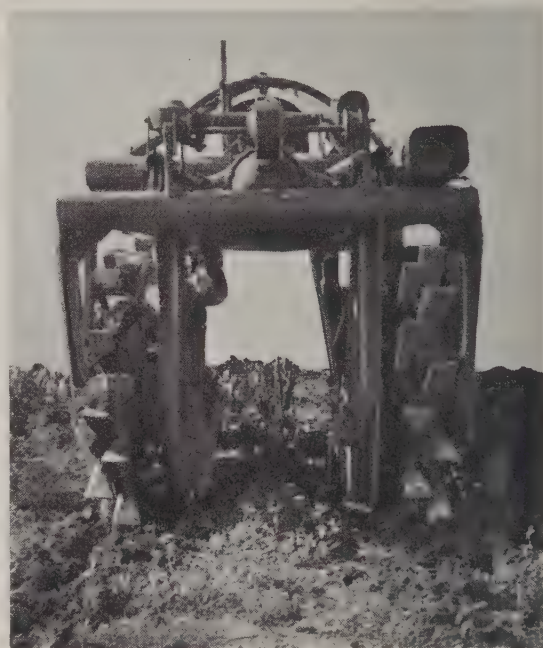
### ABOUT POLLINATION OF PLUMS AND PLANTING

Plums should be planted in richer and heavier types of soils that are well drained. The usual planting distance is 20 feet, although they may be planted 25 feet apart in very fertile soils. The Japanese varieties of Plums are self sterile; thus two varieties of Japanese Plums must be planted together to insure satisfactory cropping. Some varieties of American and European Plums are inclined to be self sterile and commercial plantings should contain at least two varieties of these species.

### Whole Root Tree Digger

*Designed and Built in Our Shop*

Tree digging revolutionized! This machine has cut the cost of the old-fashioned horse method at the ratio of 15 to 1. There are two separate 70 horsepower engines coupled together and synchronized as to speed and power. It is an ugly looking device, but runs as smooth as silk. Four years of continual experimental work in our Mechanical Research shops brought about this truly marvelous labor saving piece of machinery to unflinching success. Note that the operator is right down where he can see his work, thus assuring a balanced root system and uninjured trees. No long strings of horses which are ordinarily used in the old-fashioned way of tree digging which skinned and trampled trees. Note the extremely high clearance which eliminates the extreme bending of the trunk of the tree which is apt to injure the cambium layer by stretching the bark. Truly the most advanced fruit tree digger ever conceived.



—Shade for You and Fruit for Your Table





The MONTMORENCY (Fernwood)  
America's Leading Sour Cherry

A Wonderful Strain of  
**MONTMORENCY**  
*Fernwood Strain*

The Montmorency Cherry variety is transitional. Variations are found in every one of its important characteristics including type and growth of trees, twigs and leaves, length of stems, production, time of ripening and size as well as shape and color of fruits. Through bud selection we are able to bring out the best in the variety. Greening's Super-Selected Montmorency Fernwood Strain is the leading commercial Sour Cherry and it has proved its value in the many orchards in which it is now in production.

Leading growers everywhere are demanding our Fernwood Strain Montmorency. The trees are vigorous and strong growing, making a large tree quickly, thus coming into profitable production at an early age. The trees are more uniform in shape and size, produce more fruit which is more uniform in ripening and from 15 to 20 per cent larger in size than fruit from check trees of ordinary Montmorency which were produced by the old propagation methods. Season end of June.

The New Early Richmorency. See page 16.

*In the description of varieties, the name in parenthesis immediately following the variety name, in each case indicates the strain and is the name of the orchard in which the parent tree is located, from which propagating buds were taken.*

Number of Cherry Trees Required per Acre	
Distance Apart	Number per Acre
30x30 ft. (Sweet Cherries).....	48
20x20 ft. (Sour Cherries).....	108

# Cherries

## Made Better by "Bud-Selection"

From the hundreds of varieties of Cherries grown and sold in the United States we have carefully selected the best and further improved them through bud selection to retain every good feature and assure heavy crops. Cherries ask no favors in location or handling, provide crop diversification, bear almost annually and keep profits flowing your way.

## Sour Cherry Varieties

### MONTMORENCY (Rouse)

This is our largest Montmorency Cherry, producing sour cherries of exceptional size. Trees are spreading and comparatively slow growing when young but make a large, healthy tree when mature. Season, end of June.

### EARLY RICHMOND (Kiester)

Medium size; dark red, melting, juicy, sprightly acid flavor. This is one of the most valuable and popular of the Sour Cherries. It is unsurpassed for cooking purposes. Tree a good grower, with roundish, spreading head, and is extremely productive. The most hardy of all varieties uninjured by the coldest Winters. Ripens through June.



Here are pictures of the Montmorency and New Early Richmorency giving a graphic comparison. At left is the standard Montmorency in which the green cherries are plainly evident. Beside this at the right is a twig of the New Richmorency (Reber) reproduced in same picture showing all fruits ripe ready for picking

Greening's Tree Performance Records Hold the Secret of "Bud Selection"



## The New Early **RICHMORENCY** (Reber Strain)

U. S. Plant Patent No. 316

A new variety discovered and developed by Greening of exceptional merit, giving growers the profit advantages of a Montmorency Cherry a week to 10 days earlier than the regular varieties. The variety originated as a limb sport on the farm of L. B. Reber, St. Joseph, Michigan. First observations were made June 30, 1931. Progeny test trees were planted at the Graham Experiment Station, Grand Rapids, in 1933 and fruited in 1936 and 1937, reproducing a true Montmorency but maintaining the early ripening characteristics of the original sports. Trees in quantities of this variety—proven, pedigreed stock, are now available for commercial plantings.



*"Greening Bud-Selected"*

## SWEET CHERRIES

Sweet Cherry trees supplied the public by many nurseries have not been true to name. We established this fact by checking orchards in the Sweet Cherry belt of northern Michigan and consulted experienced growers who co-operated with us in making our selections. The only variation in Sweet Cherries of commercial importance is unproductive strains. We selected buds from parent trees producing heavy crops. In the listing below you will find those varieties which have been proven the best commercially, and in each "Bud-Selection" has emphasized their feature characteristics.

### **BING** (Rogers)

One of the best black cherries in existence. It is large, firm and delicious, and a good shipper. Tree hardy and upright grower. Middle of June.



PAUL ROSE (A White Schmidt's Bigarreau)

### **NAPOLEON** (Manistee)

Very large, pale yellow with bright red cheek, very firm, juicy and sweet. Vigorous grower and very productive. One of the best. First of July.



### **PAUL ROSE**

(A White Schmidt's Bigarreau)

Originated from a sport limb in the orchard of the late Paul Rose, the pioneer Sweet Cherry grower of Michigan. It is a white Cherry and of large size, tender, juicy, with a fine, rich flavor, ripening in July. Doctor V. R. Gardner of the Michigan State College considers it of great commercial value.

### **SCHMIDT'S BIGARREAU** (Rogers)

Remarkably hardy and productive. Fruit grows in clusters and is of the largest size. Skin deep black, flesh dark, tender, juicy, with a fine rich flavor. Stone small. July.

### **TARTARIAN** (Black Tartarian) (Lewis)

Very large, bright purplish black, juicy, very rich, excellent flavor. Tree a vigorous grower and productive. Last of June or early July.

### **WINDSOR** (Crystal Lake)

New seedling originated at Windsor, Canada. Fruit large and liver colored, quite distinctive; flesh remarkably firm and of fine quality. Recommended as a pollinizer in all commercial plantings. Tree hardy and very prolific. The most valuable late variety for market or family use; ripens in July.

Greening's are Alert and Restless to Give Something Better





The Concord Grape  
Illustration 1/2 Size

Black Grapes

- Concord.** The best known and most popular of all Grapes. The best for table, wine and market. Succeeds over a great extent of country. Ripens in September.
- Fredonia.** This variety gives promise of being the earliest good black Grape. The vine is vigorous, hardy and productive and ripens its fruit two weeks earlier than Worden. The clusters are medium in size, cylindrical and compact; the berries are large, round and persistent; the skin is thick and tough; the flesh is juicy, solid, but tender and the quality very good. Fredonia stands alone as an early black Grape.
- Moore's Early.** Bunch medium, berry round and as large as the Wilder or Rodgers No. 4. Quality very fine and vine exceedingly hardy. It has been entirely exempt from mildew or disease; in vigor of growth it is medium. Its earliness makes it desirable for a first crop maturing as it does, 20 days before the Concord.
- Seedless Concord.** A new, dark blue dessert Grape without seeds. Large size fruit in large bunches. Sweet Concord-like flavor.
- Worden.** A seedling from the Concord which it greatly resembles in color and appearance. It is, however, several days earlier, much more delicious and melting and has a flavor that is equaled by no other Grape grown. Berries and clusters are very large and compact; fully as hardy as the Concord and more productive. A sure bearer and a variable market sort.

Planting Distance and Number per Acre for Small Fruit

Kind	Distance Apart	No. plants per acre
Blackberries.....	3x7'	2,074
Currants.....	4x7'	1,556
".....	5x5'	1,742
Dewberries.....	3x7'	2,074
Gooseberries.....	4x6'	1,815
".....	5x5'	1,742
Grapes (Trellis)....	8x8'	680
Grapes (Arbor)....	6x6'	1,210
".....	6x8'	907
Raspberries, Red....	2x7'	3,111
Raspberries, Red....	3x7'	2,074
Raspberries, Black.3x7'		2,074
Strawberries.....	1x4'	10,890

Greening's Small Fruits  
GRAPES

No fruit possesses such a remarkable heritage of popularity as the Grape. It is mentioned in nearly all ancient writings, including the Bible. Grapes are to be found in every temperate climate. The earliest settlers of the United States discovered several different varieties growing from Maine to Florida. Grapes have been constantly improved during the years and are not only a favorite with the commercial grower but possess many advantages for the home garden, as they require but a small amount of space and can be trained over a back fence or trellis.

White Grapes

- Niagara.** This white Grape is justly regarded as one of the very best known; very fine quality for a table Grape; very prolific, hardy, and of fine flavor. Fruits keep well if carefully handled.
- Portland.** This variety holds first place among Grapes as an early green variety for the market. The vine is very vigorous, hardy, productive and healthy. The variety is remarkable for its luxuriant and persistent foliage. Bunches and berries are larger than those of any other early green Grape.
- Golden Muscat.** New amber white Grape having aromatic, mild, sweet muscat flavor. Large bunches, well rounded. Good keeper. (Not California type).

Red Grapes

- Brighton.** A cross between Concord and Diana Hamburg. Resembles Catawba in color, size and form of bunch and berry. Flesh rich, sweet and of the best quality. Ripens earlier than the Delaware. Vine vigorous and hardy. This variety has now been thoroughly tested and it may be truly said to be without an equal among early Grapes. Succeeds best when planted near other varieties.
- Caco.** This is a hybrid produced from cross pollination of Catawba and Concord. It inherits the characteristics of both parents, minus any of their defects. Very hardy yet it equals in high quality and melting mixture, the finest variety grown under glass. Very large, wine-red with abundant bloom. Bunch good size, compact and of good form. Ripens in advance of Concord. Vine strong, vigorous, healthy and prolific.

Gooseberries

- Downing.** Fruit is much larger than the Houghton; roundish, light green, with distinct veins; skin smooth; flesh soft, juicy and very fine flavored. Vigorous and productive. The most valuable American sort.
- Poorman.** One of the best varieties because of the vigor and productiveness of the plants. Fruit handsome in appearance and of high quality. Ripens in early Midsummer. Long in production. Large, roundish oval, wine red in color. Smooth skin, very good in quality. Plants vigorous and hardy. Thorns short and fewer than most varieties.
- Red Jacket.** A new red berry, larger than Downing; smooth, very prolific and hardy, quality and foliage the best. For years it has been tested by the side of the best American and English sorts and is the only one absolutely free from mildew, either in leaf or fruit. Promises to be the variety we have so long been waiting for, equal to the best English kinds and capable of producing large crops under ordinary cultivation wherever Gooseberries can be grown.

Currants

- Diploma (Red).** A large, red Currant, delicious for eating fresh, and excellent for jelly.
- Fay (Fay's Prolific) (Red).** One of the best of the large-fruited red Currants. Clusters and berries are large and uniform. Of medium productiveness. Quality very good.
- Perfection (Red).** A cross between Fays and the White Grape, retaining the valuable characteristics of both. Beautiful, bright red; as large or larger than Fays, holding its size to the end of the bunch. Easy to pick, a superior bearer, less acid and of better quality than any other larger Currant in cultivation.
- Prince Albert (Red).** Valuable variety for lengthening the Currant season. One of the last to ripen its fruits. Plants are large, vigorous, very dense and productive. Berries large, bright red, highly flavored, very good in quality and grow in long, tapering clusters.
- Red Lake.** A new hardy variety highly indorsed by all authorities as one of best Currants developed. Upright, vigorous growers, producing large fruit in big clusters. Pleasant sub-acid flavor.
- White Grape.** Very large, yellowish white, sweet or very mild acid; excellent quality and valuable for the table. The finest of the white sorts.
- Wilder (Red).** A new red Currant with large, fine flavored fruit of a bright, attractive red color, even when over-ripe. The leading garden and market variety; a strong, vigorous, erect grower and a great yielder.

Rhubarb or Pie Plant

- Early Scarlet.** Small stalked, but extremely early and of very highest quality. The best extra early sort for home or market.
- Myatt's Linnaeus.** An early, tender variety without being in the least tough or stringy, mild sub-acid flavor.

Asparagus

- Martha Washington.** The result of careful breeding with the object of eliminating rust. This strain was introduced by the United States Department of Agriculture. Shoots are dark green, tips tight and firm.

Blackberries

- Eldorado.** H. E. VanDeman recommends this variety thus: "This berry was noted last year, and is of much promise. It is an oblong, irregular berry of large size, fruiting in pendulous, slender, hairy spikes with few thorns. Color black; flesh deep crimson with tender core; flavor sweet, rich quality."



## Raspberries

### RED AND PURPLE VARIETIES

**Columbian.** Color dull purplish-red. Bush is a strong grower attaining a very large size. Good variety for home use but more recommended for commercial planting. Should be planted 2 ft. farther apart than any other variety.

**Cuthbert.** A remarkably strong, hardy variety; stands the northern Winters and southern Summers. Berries very large, conical, rich crimson, very handsome and so firm they can be shipped hundreds of miles by rail in good condition. Flavor is sweet, rich and luscious.

**Latham.** The Latham Raspberry is undoubtedly one of the biggest money-makers of all Raspberries. It is one of the finest looking red Raspberries on the market and produces tremendous crops. An extremely large berry, some measuring an inch in diameter. The color is attractive dark red and the quality is the very finest. In an official test conducted by the Connecticut Agricultural College under the supervision of W. H. Darrow, fruit specialist, the Latham produced 1,782 quarts more per acre than the best of other varieties tested with it. In this test the Latham variety produced 5,430 quarts of fine, luscious red Raspberries per acre. Our Latham plants are the finest that can be obtained and are absolutely disease free.

**Taylor.** Promising new variety from the New York Experiment Station. Plants tall, vigorous and productive. Berries are large, bright red, long, conical in shape. Has a rather thick, firm flesh. Quality very good. Ripens in midseason and continues for rather long period.

## Black Raspberries

**Cumberland.** A mammoth midseason blackcap that holds its stout, stocky canes with handsome fruit. Its great, glossy berries are firm enough to ship well and of good quality. Its hardiness and productiveness among the best.

**New Logan.** An early ripening variety preceding Cumberland. Plants large, vigorous, very productive, disease-resistant. Berries not as large as Cumberland, but attractive and of excellent quality.



Cumberland Raspberry

## Everbearing Raspberries

**St. Regis (Red).** Fruit commences to ripen with the earliest and continues on young canes until October. Berries bright crimson, large size, rich, sugary with full raspberry flavor. Flesh firm and meaty; a good shipper. Wonderfully prolific. Canes stocky, of strong growth with abundance of dark green, feathery foliage.

### Number of Raspberry Plants required per acre

3x7 ft. apart (in rows).....2,074 per acre  
5x5 ft. apart (in hills).....1,742 per acre

## Dewberries

**Lucretia.** One of the trailing Blackberries. Fruit is large, soft, sweet, with no hard core. Valuable for family use.

## Strawberries

There are hundreds of varieties of Strawberries and most of them are good, with favorable conditions. Conforming with our policy of careful selection we have chosen only the best varieties that will flourish almost anywhere. Perfect flowering varieties planted alone will mature a crop of fruit. Imperfect varieties should have perfect varieties planted with them—at least one row of perfects for every two rows of imperfects to furnish pollen. All are perfect varieties and therefore can be planted alone.

### Common or June Varieties

**Ambrosia Late.** The latest and best late ripening Strawberry. Ripens about three weeks after other June bearing varieties are gone. Large semi-pointed fruit. Extremely hardy.

**Blakemore.** An extra early ripening variety, highly flavored, large berry. Excellent for big plantings and shipping. Very hardy. Vigorous grower.

**Catskill.** An excellent midseason to late June bearing variety producing large fruit red inside and out. Fine flavor and fragrance. Uniform shape. Favorite freezing variety.

**Dorsett.** A new variety introduced by U. S. Department of Agriculture, which has a record of 6,640 quarts to acre. An exceptionally heavy producer of very large, light red berries, which hold color, shape and taste long after picking, making them excellent for wholesale marketing.

**Dunlap.** A medium to large berry slightly flattened, of a dark crimson shade. Flesh is red, fine in texture and quality excellent. The plant is hardy and a good grower. This variety has been a favorite for 35 years.

**Fairfax.** Another new, wonderful shipping berry, introduced by U. S. Department of Agriculture. Large size berries of light red color. A productive fruiter and conceded to be one of the finest of new introductions.

**Premier.** The very earliest to fruit, continuous throughout a long season. Fruit large of good color. Variety noted for its adaptability to varying conditions. Flesh red to center.

The Latham Raspberry  
The Best of the Red Varieties

## Everbearing Strawberries

**Gem.** A sweet, deep red, glossy appearing berry of excellent marketing quality. Berries are above average in size, outstanding in firmness—vigorous plants with heavy root system, hardy and blight resistant.

**Mastodon.** Improved strain of this popular giant variety. A delicious berry of immense size; an incredible cropper of choice quality and one of the strongest growers yet developed.

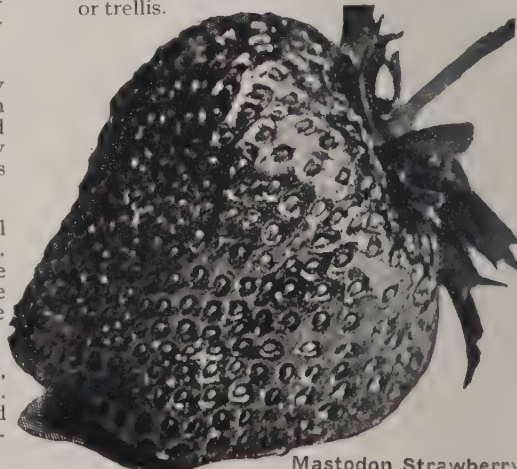
**Wayzata.** Plants make strong, vigorous growth but produce very few runners. Crowns are easily divided and often propagated in this manner. Berries fine bright red in color and attractive. Considered the highest in quality of all everbearers. Excellent variety for home garden and commercial planting where there is plenty of moisture. Does best when grown on a hill system.

### Number of Strawberry Plants required per acre

1x4 ft. apart.....10,890 per acre

## Boysenberries

**Boysenberries.** A berry combining the flavor blend of Raspberries and Loganberries. Immense size, often 2 inches in length. Plant 6 ft. apart, train on wire or trellis.



Mastodon Strawberry

Evolution is Speeded Up with Greening "Bud Selection"



# Greening's Evergreens and Conifers

## Give Charm, Beauty, Color to Exterior Home Furnishings

We are all familiar with the beautiful variety of shades available in evergreens ranging from deep, dark green, through all the shades and tints to the palest, most delicate Apple-green, providing great usefulness and flexibility for the home landscape. Our scientific method of growing evergreens makes for symmetrical development and all specimens are top and root pruned into handsome, shapely trees, grown in soil that retains ball in digging. We dig our evergreens with an oversized ball of earth, thereby keeping the entire root system intact, which assures successful growth after transplanting. Because of our strict, scientific methods of growth and handling, you are assured a wide selection of the **finest** plants available in this country.

### ABIES - Fir

**Abies concolor** (White Fir). Symmetrical but not stiff in appearance, long, soft, grayish-blue needles. For tall backgrounds, screens or choice individual specimens. Grows to a height of 70 ft.



Pfitzer's Juniper

### DOUGLAS FIR

**Pseudotsuga douglasi** (Douglas-fir). Large, conical form, branches spreading, horizontal, leaves light green above, glossy blue tone below. Rapid growing to great height. Valuable for its adaptability to many situations.



*Juniperus virginiana cannarti*  
(Cannart Redcedar)

### BIOTA - Chinese Arborvitae

**Biota** (Oriental Arborvitae) (*Thuja orientalis*). Bushy, upright in growth, oval shape, very attractive. Branches arranged in flat, vertical planes. Beautiful deep green color. Foliage very lacy. Slow growing to 25 ft.

**Biota** (Berckmans Golden Arborvitae) (*Thuja orientalis aurea nana*). Conical, foliage warm golden. For garden or foundation planting. Very slow growing to 4 ft. and formal in habit.

### JUNIPERUS - Juniper

**Juniperus chinensis** (Column Chinese Juniper). A very handsome, upright, densely foliated cedar type. The color is a gray-green at all seasons. One of the best upright-growing Junipers. Grows to 20 ft.

**J. chinensis pfitzeriana** (Upright Pfitzer Juniper). An upright form of the popular spreading Pfitzer Juniper with identical gray-green foliage. Grows to about 3 ft. in height.

**J. columnaris** (Blue). A stately evergreen, narrow columnar form. Foliage of bluish cast. Grows to 20 ft.

**J. excelsa stricta** (Spiny Greek Juniper). A very symmetrical conical outline which on account of its slow growth and dense habit is desirable for foundation plantings. Foliage blue-green, bristle tipped. Grows to 6 ft.

**Juniperus hibernica** (Irish Juniper). A distinct and beautiful variety, of erect, dense, slim conical outline, resembling a pillar of green. Very desirable for formal gardens. Grows to 8 ft.

**J. pfitzeriana** (Pfitzer Juniper). No doubt the most popular of spreading evergreens; grows to about a 6 ft. spread. Excellent for use in front of tall plants, under windows and in any place where a low spreading evergreen is needed.

**J. sabina** (Savin Juniper). Half erect form of the Juniper family. Color distinct dark green. Ideal for foundations, groups or low borders.

**J. virginiana** (Redcedar). A well known American tree; varies in habit and color of foliage, some being quite stiff, regular and conical and others loose and irregular. Grows to 40 ft.



Innumerable  
beautiful effects  
can be  
obtained  
with  
foundation  
plantings of  
Evergreens

Read About Greening's Sensational Peach Introductions—Pages 8-9-10



**JUNIPERUS**—Continued

**J. virginiana cannarti** (Cannart Redcedar). A fine, pyramidal, compact grower of dark green appearance; some of the branches lengthen out and droop, presenting a novel and pretty picture.

**Juniperus virginiana glauca** (Silver Redcedar). The compact, conical habit of this variety, combined with its silvery-bluish foliage, renders it very distinct and desirable. Grows to 40 ft.

**J. virginiana keteleeri** (Keteleeri Redcedar). Compact and formal, narrow pyramidal growth. Gray-green, fine foliage. Rather unusual and very desirable. Bears blue berries in Autumn. Grows to 15 ft.

**PICEA – Spruce**

**Picea canadensis** (White Spruce). A native tree of medium size, of pyramidal form. Foliage silvery-gray. Grows to 50 ft.

**P. canadensis albertiana** (Black Hills Spruce). Resembles the White Spruce, except somewhat slower in growth and more compact. Its color too is even more silvery than the White Spruce, sometimes even rivaling the Blue Spruce. Grows to 60 ft.

**P. excelsa** (Norway Spruce). Extremely hardy, of lofty, rapid growth and pyramidal form. The branches assume a graceful, drooping habit when the tree attains 15 to 20 ft. in height. Grows to 75 ft.

**P. pungens glauca** (Blue Colorado Spruce). One of the most beautiful of all the Spruces. In form and habit similar to White Spruce. Foliage of a rich blue or sage color. Grows to 60 ft.

**P. pungens glauca kosteriana** (Koster Blue Spruce). Similar to the Blue Colorado Spruce except that the foliage is a much brighter blue.

**P. pungens moerheimi** (Moerheim Blue Spruce). A beautiful new introduction in the Blue Spruce family. Has needles of dazzling blue right up to the stem. Branches grow in an upward angle. This is one of the best of the Blue Spruce introductions.

**PINUS – Pine**

**Pinus montana mughus** (Mugho Pine). Our strain is a genuine true dwarf form, many compact stems and with good dark green foliage which is retained throughout the Winter. Grows to 4 ft. in diameter.

**P. nigra** (Austrian Pine). Tree remarkably robust, spreading, leaves long, stiff and dark green; growth rapid. Solid shape. Grows to 50 ft.

**P. sylvestris** (Scotch Pine). A native of the British Islands. A fine, robust, rapid growing tree, with stout, erect shoots and silvery green foliage. Grows to 50 ft.

**TSUGA – Hemlock**

**Tsuga canadensis** (Canadian Hemlock). A broad, pyramidal, medium-sized tree of dense growth with rich green foliage. Branches thickly set with more or less pendulous tendency, giving a particularly graceful effect to the whole. Choice as a single lawn tree or for hedge purposes. Grows to 75 ft.



Pinus Montana Mughus

**TAXUS – Yew**

Taxus or commonly known Yews are without question the most desirable and satisfactory of all evergreens. Leaves are dark green, waxy and needle-like. Plants studded with red berries in Fall, bearing the appearance of miniature lanterns. The four most desirable species are offered here.

**Taxus cuspidata** (Japanese Yew). Dense growing, habit high spreading; foliage deep green. Slow growing to spread of 25 ft.

**T. cuspidata brevifolia** (Spreading English Yew). A form of Yew with short, dark green leaves. More spreading and lower than Japanese. A very handsome variety. Rare.

**T. capitata** (Upright Yew). Pyramidal habit with rich, dark green foliage. Slow growing to 30 ft.

**T. media hicksii**. An interesting recent introduction of Taxus, fast growing columnar form, with dense, dark green foliage, frequently as broad at the top as at the bottom. Its shape lends itself well to hedges which can be shorn and kept low. Grows to 15 ft.

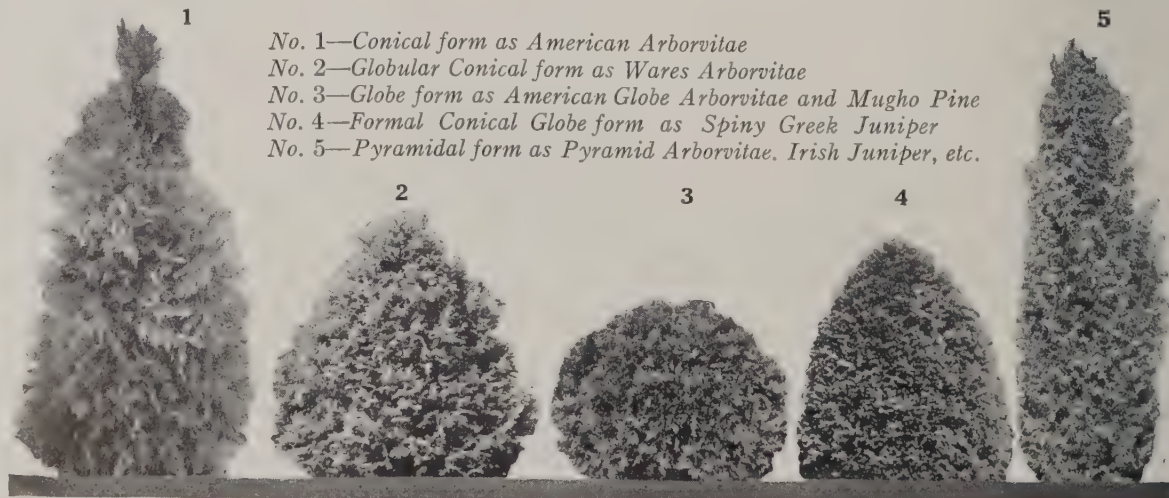
**THUJA – Arborvitae**

**Thuja occidentalis** (American Arborvitae). A beautiful native tree commonly known as the White Cedar; especially desirable for screens and edges. Slow growing, pyramidal form, compact, fern shape foliage. Grows to 40 ft.

**T. occidentalis pyramidalis** (American Pyramidal Arborvitae). A tall, slender column of dark green, resembling the Irish Juniper in growth; retains its color in the Winter. Will stand severe shearing. Grows to 25 ft.

**T. occidentalis wareana** (Ware Siberian Arborvitae). Considered the aristocrat of Arborvitae; globular, cone-shaped with compact, fresh blue-green foliage. Grows to 15 ft.

Picture at right illustrates most popular forms of Evergreens from which you choose the best for your plantings



No. 1—Conical form as American Arborvitae  
No. 2—Globular Conical form as Wares Arborvitae  
No. 3—Globe form as American Globe Arborvitae and Mugho Pine  
No. 4—Formal Conical Globe form as Spiny Greek Juniper  
No. 5—Pyramidal form as Pyramid Arborvitae, Irish Juniper, etc.

"Bud Selection" Produces Control of Fruit Profits



# Greening's BROADLEAF EVERGREENS

To provide flowers in season, color year 'round, delightful and colorful contrast to other ornamental stock in hedges, borders and foundation plantings, Broadleaf Evergreens are great favorites. Many of the plants prefer shade, well protected locations and acid soils.

*Note*—Where it is desired to plant material which requires acid soils and the soil in the location is not of this nature, it can be treated to create an acid condition. Information will be furnished on request.

## EVERGREEN SHRUBS

**BUXUS sempervirens** (Common Box or Boxwood). Perhaps the most valuable of broadleaf evergreens. Grows in ordinary soils but new plants should be shaded from the sun Winter and Summer until established. In severe cold weather should be protected. Dense in growth and easily formed for formal planting.

**COTONEASTER horizontalis** (Rock Coton-easter). Small shrub with flat spray-like leaves. Horizontal branches cover ground around base. Pinkish-white flowers followed in Fall by bright red fruit. Dark green small leaves hold to branches all Winter turning crimson in Fall.

**DAPHNE cneorum** (Rose Daphne or Garland-flower). Low shrub growing not more than 8 to 10 in. high to 24 in. across. Bears numerous clusters of fragrant, pink flowers in Spring and Fall. Leaves remain green throughout Winter. Should be protected during Winter. Requires slightly acid soil.



The Rose Daphne or Garland Flower



### SPECIAL NOTICE

Water Evergreens thoroughly during dry weather. Put on sufficient water so it soaks into the roots.

**MAHONIA aquifolium** (Oregon Hollygrape). Handsome, low growing shrub for border or foundation planting. Attractive, Holly-like leaves arranged in feather fashion, taking on bronze tone in Fall. Flowers yellow in dense, erect 3-in. racemes or panicles. Fruit a small bluish berry. Blossoms April and May. Should be planted in sheltered positions in moist soil slightly acid.

## EVERGREEN VINES

**EUONYMUS radicans** (Wintercreeper). The finest of all the cultured species of evergreen climbing vines. Greenish white flowers. Small leaves of dull green. Does well in sun or partial shade or in any good soil. Fruit pale pink.

**EUONYMUS radicans vegetus** (Bigleaf Wintercreeper). A hardier variety thus more desirable for a low spreading bush, tight hedge or high climber for wall. Large leaves of dull green. Handsome fruit.

## Planting and Care of Evergreens

Greenings culture of evergreens assures you of properly grown plants to make transplanting safe. Soil conditions are such that secure balls of earth can be obtained in the digging of each plant. Numerous transplantings are made in Greenings growth of evergreens to complete a compact and bushy root system. Thus when balled with earth, the maximum root development is retained and is transplanted with a minimum of disturbance.

A hole considerably larger than the burlap ball is dug to plant an evergreen tree without removing the burlap covering. The plant should be set just about the previous level, then the burlap unfastened, cut away and laid back from the top. The rest will rot in the earth. The balance of the hole should be filled with good top soil watering at the same time so as to settle the soil in and around fibrous roots.

Spread an inch or so of loose, dry earth or peat moss on top to prevent drying out. See that there is a slight depression rather

than a mound about the plant which will hold water instead of shedding it.

Water thoroughly daily if necessary until the plant is well established. Drying out of newly planted evergreens is a common cause of loss.

Manure is the best fertilizer for evergreens and should be dug into the soil and the area well watered or it may be applied in solution. Driving a hole at 2-ft. intervals, down to the roots for the application of fertilizing solution is good practice.

The Red Spider is the most common insect which attacks evergreens. If needles seem to be mottled brown or gray, covered with fine web, indicates the presence of this pest. Trees should be sprayed early in the season before growth starts with a miscible oil or an oil emulsion diluted according to manufacturers' directions. After growth starts, syringe forcibly with a hose, dust with sulphur on warm days or spray with lime sulphur Summer strength or with Rotenone compound.

Greening's Research Extends to Machines for Quality Production





Ampelopsis

## AKEBIA

**Akebia quinata** (Fiveleaf Akebia). A beautiful, hardy Japanese vine with unique foliage and chocolate-purple flowers of delightful fragrance and light colors. The foliage is never attacked by insects and it is almost evergreen. The fruit is a black-seeded berry. A stout, useful climber reaching a height of 20 ft. Grows well in the shade.

## AMPELOPSIS IVY

**Ampelopsis quinquefolia** (Virginia Creeper). A well known, very rapid growing vine extensively used for covering walls, verandas, trunks of trees. Leaves compound with 5 leaflets on long stems. Turn rich crimson in Autumn, needs support as the vine lacks sucking discs.

**A. quinquefolia engelmanni** (Engelmann Creeper). A splendid climber growing 6 to 10 ft. in a season. This variety has become very popular because of its ability to cling to walls, etc. without wire trellis. Slightly smaller leaves than the Virginia Creeper above. Especially desirable for covering small wall areas.

**A. tricuspidata** (Veitch Boston Ivy). A beautiful, hardy Japanese species. Considered one of the best climbers for covering walls and clings firmly to the smoothest surface covering it easily with overlapping leaves which form a perfect mass of foliage. The color of the leaves is a fresh deep green in Summer changing to bright shades of crimson and yellow in Autumn. Somewhat tender and slow growing when young, yet is perfectly hardy and grows faster once it becomes established. Plants should be planted 4 to 5 ft. apart and should be protected the first Winter planted.

## CELASTRUS

**Celastrus orbiculatus** (Oriental Bittersweet). The Oriental variety of this popular vine, rapid growing, producing an abundance of brilliant orange-scarlet fruit in small clusters at the axils of the leaves. When the foliage has fallen the vine becomes very showy as the stems are longer than the American variety listed below providing a better bouquet with which to decorate the home during the Winter months. Grows as well in the shade as in the sun.

**C. scandens** (American Bittersweet). A hardy, vigorous, native variety, fruit clusters are mostly terminal hence not much hidden by the foliage. Fruit is yellow, turning to a brilliant crimson. While not quite as good for bouquets as the oriental variety as it has shorter stems, it is a very desirable ornamental vine for trellis or arbor.

# ORNAMENTAL Climbing Vines

Vines are the laces and frills of Nature's dress. They enable us to beautify barren walls and fences, to soften eccentricities of architecture, to accentuate the beauty of classic columns, of trellis, porch or rockery. Their graceful foliage alone would be a rich reward for their use but many vines have beautiful flowers as well. They make a lavish contribution in varied color, they perfume Summer nights with rare odors. A pergola, gracefully walled with vines is a delightful out-of-door room for a Summer's day.

Many varieties attract beautiful birds. The Honeysuckle in attracting the diminutive humming bird whose green and red body is often to be seen silhouetted against the orange cone of the bloom.

There are also the Ivies with their suave, glossy leaves that bespeak dignity and long establishment. We associate them with brick and stone and rugged walls.

We feel that our fine varieties of ornamental vines are a most valuable contribution to landscape gardening.

## CLEMATIS

Of all the vines used either for shade or decoration, very few, if any, are superior to the Clematis in its many varied forms. While the large-flowered kinds are not so good for shade until they attain considerable age, their wealth of bloom makes them the grandest embellishments to the porch known. Of the small-flowered varieties, *Paniculata* undoubtedly holds the lead either as a shade producer or for its abundance of bloom. It is a rampant grower in good soil and the lateness of its bloom, coupled with the exquisite perfume of its flowers makes it one of the most desirable of all vines.

**Clematis henryi** (Winter Clematis). A large flowering variety, producing creamy-white flowers. Grows to 10 ft., blossoms in late July or early August. Continues to bloom freely for several weeks. Dense green foliage of striking appearance.

**C. jackmani** (Jackman Clematis). Large purple flowering variety, growing to 10 ft., rapid climber, blossoms freely from July to September. Flowers very showy. Remarkable for their velvety richness. Bloom several weeks.

**C. Mme. Edouard Andre**. A red flowering variety entirely distinct from other varieties in appearance. Makes a striking back curtain for perennial, Rose or Iris gardens. Grows to a height of 8 ft. and blooms persistently from July to September.

**C. paniculata** (Sweet Autumn Clematis). A Japanese plant possessing unusual attractive merit, growing 20 to 30 ft. with unusual rapidity. Luxuriant growth and will stand frequent cutting back. Foliage is a beautiful green, produces fragrant, star-like white flowers borne in immense sheets in reckless abundance late in the season. September. Later has feather-like seed pods, seemingly a second blooming period.

**C. Ramona**. A light blue flowering variety growing to 8 to 10 ft. in height with blossoms appearing in July and lasting for several weeks.

## EUONYMUS

(See **Broadleaf Evergreens**, page 21)

## LONICERA - Honeysuckle

**Lonicera japonica halliana** (Hall's Japanese Honeysuckle). Because of the fragrance and very sweet honey juices of this variety it is most attractive to humming birds. Vine obtains length of 10 to 15 ft.

and is excellent as a ground cover as well as a climbing vine. Blossoms open white, then turn to yellow, appearing in early Summer and September. Fruit is yellow, very showy against green leaves in Winter. The vine is evergreen until Mid-winter and has a ground cover which keeps its color until early Spring.

**L. sempervirens** (Scarlet Trumpet Honeysuckle). The trumpet shape and inodorous flowers of this vine of bright scarlet make it unusually attractive. Flowers appear in June and continue until September. Leaves are a rich, dark green and gray underneath. Fruits in Autumn, yellow and hang in clusters well into the Winter. Rapid grower spreading 10 to 15 ft.



Lonicera (Honeysuckle Vine)



**LYCIUM**

**Lycium chinensis** (Chinese Matrimony Vine). Sometimes called the Chinese Boxthorn, particularly desirable for ground cover or for bare and rocky places. Slender drooping branches, somewhat thorny and have gray-green leaves. Blossoms in June and all Summer followed by enormous quantities of crimson berries which hang into the Winter. An excellent bird allurer. Spreads rapidly to a distance of 8 to 10 ft. Grows well in dry and difficult situations. Desirable for embankments.

**POLYGONUM**

**Polygonum auberti** (China Fleecevine). Where quick shade and beauty are needed, this is an excellent plant and will grow 20 to 25 ft. first season. Is a hardy, twining, woody perennial creating entirely new growth each season. Slender stems, broadleaved plant, flat-shaped. Produces greenish-white flowers, fragrant in long, erect or drooping clusters in August. Excellent for per-

gola or trellis. One of the most prolific flowering vines in existence.

**WISTERIA**

**Wisteria floribunda multijuga** (Japanese Wisteria). An exceptionally hardy variety, has 13 to 19 leaflets and fragrant flowers. Pinkish white flowers are borne on long racemes up to 3 ft.

**W. sinensis alba** (White Chinese Wisteria). An exceptionally rapid growing, tall vine, producing small white flowers of pure white in dense, drooping clusters, 8 to 12 in. long. Early season, May and June. Obtains a height of 20 to 30 ft., tightly twining, curling around rope, branches or trees, or anything to which it can attach itself. Foliage is grayish-green in color and is of such sturdy wood growth that it can be trained to standard tree form.

**W. sinensis** (Chinese Wisteria, Purple). A vine of the same habits and leaf as the white varieties except producing small purple flowers in large drooping clusters. Lilac-like in form.



Wisteria Sinensis Alba

## Greening Ornamental Hedges

Nothing in the order of a fence can rival the friendliness and beauty of a hedge, which by careful selections of varieties will conform to any environment. There is the closely clipped box for orderliness of effect. Barberry described under shrubs, page 29 when allowed to grow naturally, has a rustic appearance.

Other popular varieties of hedge plants are listed on this page but you are not confined to these varieties. Many shrubs as Spirea, page 36, and low growing evergreens, such as Arborvitae and even Roses can be grown in hedge effects.

### **BERBERIS - Barberry** (See page 29, Shrubs)

### **LIGUSTRUM - Privet**

Besides being one of our best hedge plants, the different species of the Privet form interesting groups on the lawn. They are almost evergreen and of dense, shapely habit. Their white flowers grow in pretty sprays, are fragrant, and followed by berries of different colors. Valuable also planted as shrubs.

**Ligustrum amurense** (Amur Privet). The Chinese variety, harder than the others, growing 8 to 12 ft. high, with dark green leaves which persist almost through the Winter. Evergreen in the South. Bears erect panicles of handsome white flowers in June, followed by black berries. This is the best of all plants for hedge purposes. Hardy in any location. One of the best for shrubbery planting.

**L. ibolium** (Ibolium Privet). A fine, hardy, new variety which we believe should displace California in climates where California is not perfectly hardy. Ibolium has the same beautiful foliage and other fine characteristics of California, except that the foliage does not hang on as long into the Winter.

**L. ibota** (Ibota Privet). A fine and hardy border shrub, of spreading habit, with curving branches and leaves of grayish green. Pure white flowers in June followed by bluish-black seeds. Considered among the hardiest of Privet varieties. Makes an excellent hedge and very ornamental shrub.

**L. ovalifolium** (California Privet). A species of unusual beauty that has become the most popular of all hedge plants. Its shining leaves give it value for porch and terrace decoration when grown in standard form. Can be sheared to any desired shape.

**L. ibota regelianum** (Regel Privet). The horizontal, sometimes drooping branches, are distinctly beautiful. Has longer and narrower leaves than other varieties. This is one of the best of Privets. Absolutely hardy and graceful. Berries remain on all Winter and are very attractive.

**L. vulgare** (European Privet). A good hedge plant with narrow, dull green foliage and quite showy flowers of white. Blooms June and July. Clusters of black berries follow the bloom which adhere to the shrub all Winter.



Privet—The Most Attractive of Hedge Plants



# Traditions of Quality and Value

*Handed down from Father to Son Guide the Policies of Greenings*



J. C. W. GREENING  
1828-1908



CHAS. E. GREENING  
1858-1928



BENJAMIN J. GREENING  
1882-1941



CHAS. B. GREENING  
Director

## Greenings Pioneered One of the Few Great Plant Breeding Developments

THE GREENINGS have been thorough workmen, deep students of the secrets of Nature. No task was too great, no time too long to discourage the Greening thirst for improvement in methods of propagation, development of superior varieties of fruits and improvement of old. The outcome has been the reward of the succeeding generation, if not the originator of the experiments launched. The experiments that succeeded have been developed under close observation on Greening soil.

Through these years of effort Greenings have enjoyed full cooperation of the United States Department of Agriculture, agricultural colleges, orchardists, recognized experiment stations and individual horticulturists working more or less in the interests of pure science.

The Greenings worked always toward practical improvement in fruits, flowers, shrubs and trees, applying their findings in a prac-

tical way, generation after generation, on a large scale, giving the average grower something he could immediately use in every day practice, to his benefit and profit, giving him truly—"Proven Plants That Produce."

Nearly a third of a century ago the Greenings pioneered an undertaking that has proved so successful it has utterly revolutionized fruit growing and spread its beneficial influences into other branches of horticulture.

That experiment was "Bud Selection" a subject to which the first two pages are devoted in an explanation of the method and a clear statement of facts that should be a revelation to all who have not gone into the subject in a scientific way.

We are proud to have been the pioneers to have blazed the trail to new methods of better fruit production. It has been long and costly but is rewarded in the fact that we have removed the greatest element of chance and uncertainty for the commercial fruit grower.



HOWARD D. FASHBAUGH  
President and Treasurer



At the left is a photo taken in 1915 in the Old Greening Orchard John C. W. Greening planted the day he voted for Abraham Lincoln for president in November 1860. Left to right—the late Mrs. John C. W. Greening; her son, the late Charles E. Greening; her grandson, the late Benjamin J. Greening, and her great-grandson, Charles B. Greening.

At the right—Photo taken in same orchard 25 years later. Again you see four generations. Left to right—Mrs. Charles E. Greening, her son, the late Benjamin J. Greening, and her grandson, Charles B. Greening (the little boy seen in the other photo) and her great-grandson Charles B. Greening, Jr.





# "Born 1850—Still Growing"

*A Creed to Which the Life Span of Four Generations is Dedicated*

## 94 YEARS OF SPECIALIZED EXPERIENCE

The growth of GREENING NURSERIES is one of the great family-business romances that you rarely find in this country. Well over half the age of the country itself, GREENING NURSERIES is a fine illustration of the rewards that this nation can give in return for plain living, hard work, common-sense management and fair dealing. As America has grown, so has GREENING NURSERIES grown, until today GREENING NURSERIES stand in the front rank, recognized as a world leader!

Nearly a century ago, John C. W. Greening came to the United States and settled on one

acre of rented ground in Monroe, Michigan. There he set out his first few trees. With him from the old world he brought something worth far more than worldly goods; he brought hard-learned secrets of growing things and the ambition to work hard and establish himself in a new land.

## THE SONS SUCCEED THE FATHERS

Gradually he developed and expanded his little nursery, it grew as his family grew. And in handing over his task to his son, Charles E. Greening, he also handed over a lifetime of experience and thorough training in his responsibilities. And so, from generation to generation this creed has been handed down: "Work hard, but work well . . . and remember, your responsibility to those with whom you work and deal."

Today, the succeeding generations of the family, actively operate GREENING NURSERIES, clinging to the simple objectives of the founder. Under their management is a flourishing "green empire" growing plants in infinite variety—hundreds of fertile acres, breeding and producing nursery stock of unsurpassed quality.

A Block of Thrifty  
Evergreens

Peach Tree  
Blocks in  
Greening's  
Big Nursery

The Mammoth, Modern  
Greening Cellars and  
Packing House



# Greening's ORNAMENTAL AND SHADE TREES

## Deciduous Trees

In the planting of the right varieties of trees for suitability and harmonious combination, considerable knowledge of tree life, climate, soil conditions, etc. is required. Planting too closely is one of the common faults; inadequate root space does not allow the tree to grow properly and thus attain its greatest natural beauty.

We have a department where complete information regarding trees, shrubs and flowers is at your service without charge. If it is not possible for you to pay us a personal visit, we will be very glad to give you whatever information we can by mail if you will write us the details of your problem.

### AILANTHUS

**Ailanthus glandulosa** (Tree of Heaven). An extremely quick-growing tree; 60 ft. tall, and tropical looking with pinnate, palm-like leaves. Valuable because it thrives in smoky cities and in soils where other trees perish.

### ACER - Maple

Trees of this group are hardy, vigorous, adaptable to many soils, free from diseases, easily transplanted, regular in outline and beautiful in leaf. Nearly all are brilliantly colored in Fall, especially the North American species.

**Acer dasycarpum** (Silver Maple). Of quicker growth than most trees and valuable where immediate shade is required. Forms a large spreading head; the fine leaves are silvery beneath.

**A. palmatum atropurpurea** (Red Japanese Maple). One of the most ornamental of Maple trees. Excellent for specimen purposes. Grows to a small, graceful tree of about 25 ft. Smooth, slender branches. Deep red foliage from beginning of season. Very dwarf growing. Exceptionally hardy.

**A. platanoides** (Norway Maple). A handsome tree of large, fairly rapid growth forming a dense, rounded head of strong branches and broad, deep green leaves; sturdy, compact, vigorous, it is one of the very best formal trees for lawns, parks and gardens.



Japanese Red Maple



Cutleaf Weeping Birch

**A. platanoides schwedleri** (Schwedler Maple). The Purple Norway Maple's beautiful leaves attract attention at all seasons, but are especially fine in Spring, when their gleaming red and purple contrasts brightly with the delicate green of other trees. In Midsummer they are purplish-green, in Autumn golden yellow.

**A. saccharum** (Sugar Maple). This tree is chieftain of its kind, straight, spreading, symmetrical, of grand proportions, longer lived than most men who plant it. It grows well in all except damp, soggy soils, and roots deeply, allowing the grass to grow close about its trunk. Its leaves have very rich Autumn tints of clear yellow and scarlet.



Norway Maple

### BETULA - Birch

The delicate, flexible branches of the Birch and conspicuous white bark give them an individual and distinctive chance in both growing and dormant seasons. When young birches have dark, greenish bark changing to the characteristic paper-like white as the trees mature. They thrive in moist sandy loam soil.

**Betula alba** (White Birch). Grows to large size up to 60 ft., erect in structure. Chalk colored white bark and thick, dark green leaves.

**B. alba laciniata** (Cutleaf Weeping Birch). Noted for its colorful bark, dainty leaves and graceful pendulous branches. Beautiful lawn specimen of fountain like form growing to 35 feet.



Lombardy Poplars



## ORNAMENTAL AND SHADE TREES—Continued

**FAGUS - Beech**

One of the most decorative and hardy of all cultured trees, exceptionally hardy, although it prefers a well-drained light soil. Care in planting is necessary as a long taproot is present and should be preserved. We make a practice of transplanting this group regularly to develop a vigorous root system without long tap root, therefore can be replanted successfully.

**Fagus sylvatica** (European Beech). Perhaps the most beautiful of the group, hardy throughout the United States. Often reaches a height of more than 100 ft. Grows as a specimen tree, forms a huge, broad top with horizontal, descending branches, has a bulky trunk which sometimes measures 6 ft. in diameter. Smooth, light gray bark, lustrous, dark green foliage. Forms a delightful contrast.

**F. sylvatica atropurpurea** (Purple Beech). Is identical with the European Beech except with purple leaves. One of the finest trees with colored foliage. Has the same habit of growth.

**FRAXINUS - Ash**

**Fraxinus americana** (American White Ash). A splendid lawn or street tree with spreading and upright branches forming an oval. Long, compound leaves, lustrous green above, white beneath, turning to shades of yellow and violet in Autumn. Grows 60 ft.

**GINKGO - Maidenhair Tree**

**Ginkgo biloba** (Maidenhair Tree). An Asiatic hardy, deciduous tree called Maidenhair tree because of its attractive foliage, resembling the form of a Maidenhair fern. Grows to 120 ft. with characteristics diagonal upright form and is much used as a street or park tree for planting as a specimen or picturesque effect if desired. Have light, glossy, fan-shaped leaves.

**GLEDITSIA - Honeylocust**

**Gleditsia triacanthos** (Common Honeylocust). Good for park or street planting and makes impenetrable hedges if planted thickly and pruned severely. Bears small pink flowers in May in racemes followed by pods often 18 in. long. Height 60 ft.

**MORUS - Mulberry**

**Morus tatarica** (Russian Mulberry). A rather small growing tree, very hardy, with dark red fruit and very attractive to birds. They are planted for ornamental purposes but many orchardists plant them in orchards as bird allurers to save fruit.

**M. alba pendula** (Teas' Weeping Mulberry). One of the best of small weeping lawn trees, forming a perfect umbrella-shaped head. Foliage light green, deeply lobed. Fruit reddish purple. Thrifty and hardy.

**PLATANUS****Planetree - Sycamore**

**Platanus orientalis** (Oriental Planetree). One of the oldest cultivated trees and among the best for street and avenue planting. It grows rapidly to grand size, is bold, picturesque, healthy, free from insects, vigorous in all soils, especially along the water's edge. A lofty, wide-spreading tree, growing 60 to 80 ft. tall, with large, leathery, clear-cut leaves that turn yellow in Fall.

**POPULUS - Poplar**

**Populus bolleana** (Bolleana Poplar). Similar to the well-known Lombardy Poplar in habit, but broader, and like it useful in breaking the monotony of lower, round-topped trees. Will grow to a tall spire, 80 ft. high. Its leaves are glossy green above, silvery beneath. A favorite with landscape gardeners.

**P. nigra italica** (Lombardy Poplar). Attains a height of from 100 to 150 ft. Well known and remarkable for its erect, rapid growth and tall, spiry form. Indispensable in landscape gardening, to break the ordinary and monotonous outline of most other trees.

Get Beauty in Full Measure with Flowering Trees



Pin Oak

**QUERCUS - Oak**

**Quercus palustris** (Pin Oak). Almost pyramidal in habit and sometimes described as half-weeping when old, because its lower branches touch the ground. It grows and develops the family characteristics faster than most Oaks, as may be seen from some fine avenues planted within the last score of years. It grows 60 to 80 ft., sometimes taller. The leaves are deep green, glossy and finely divided. Orange-scarlet in Fall.



Oriental Planetree



## ORNAMENTAL AND SHADE TREES—Continued

**SALIX - Willow**

Besides the beauty of their airy Summer foliage the Willows have a distinct value in the brightness of their bark when leaves have fallen. There are few trees that can be used to such advantage for cheery Winter effects. They grow fast and are adapted to a variety of soils and uses. Frequent cutting back gives a thicker growth of bright young twigs.

**Salix blanda** (Wisconsin Weeping Willow). Of drooping habit and hardier than *Salix babylonica*. Valuable on account of its ability to resist severe cold.

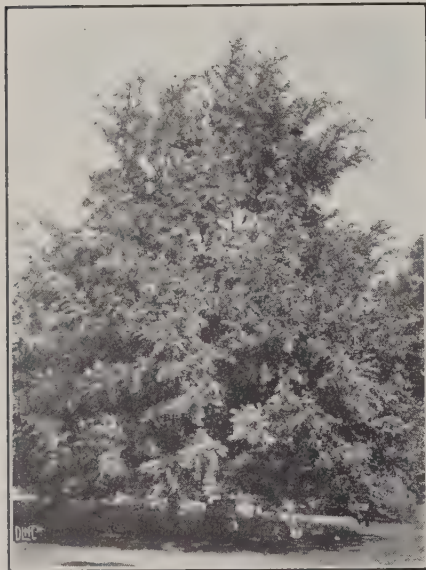
**S. discolor** (Pussy Willow). See description under **Shrubs**, page 34.

**S. elegantissima** (Thurlo Weeping Willow). Rapid growing weeper but with very brittle branches.

**S. pentandra** (Laurel Willow). Ornamental tree of upright growth; bark brownish green, leaves dark, glossy green; excellent for seashore planting.

**SORBUS - Mountain-Ash**

**Sorbus aucuparia** (European Mountain-ash). Medium-sized tree, with handsome, pinnate leaves, neat habit and showy crops of bright red berries, persistent until late in Winter, giving a brilliant note to the Autumn landscape. Hardy, erect, 20 to 30 ft. high with smooth bark and dense, regular heads; berry clusters large and bright.



Chinese Elm



Sorbus aucuparia (Mountain-Ash)

**ULMUS - Elm**

**Ulmus americana** (American Elm). Easily distinguished by its wide-arching top, vase-like form and pendulous branchlets. Next to the Oak, this is the grandest and the most picturesque of American trees. Attains 80 to 100 ft. Dull yellow or brown in Fall.

**U. moline** (The Moline Elm). A select strain. Grows vigorously and quickly, developing into a dense, conical specimen with a central leader. Smooth, clear gray bark.

**U. glabra camperdowni** (Camperdown Elm). One of the finest drooping lawn trees. The branches spread horizontally in an attractive way and then gracefully turn down, forming a picturesque natural arbor.

**U. pumila** (Chinese Elm). Faster growing than any other Elm and often reaches 80 ft. in height. Regular in growth when pruned. In youth and in middle age it is pyramidal in outline. Dark gray bark. Exceedingly useful as a street tree in cities as it does not seem to mind smoke. Despite its unusual speedy growth, the wood is hard and tough as birch. No faults except that it is not graceful when it reaches very old age; can also be used as a tall hedge plant when closely pruned and trimmed.

**HOW GREENING'S MAINTAIN ENORMOUS TREE PRODUCTION**

Another Cost Cutting Greening Invention. Created, Designed and Built in Greening Research Shops

**The Greening  
TREE PLANTER**

Truly a mechanical marvel. Note that feeders ride backwards, feeding mechanical planters which automatically correctly space and plant two rows at once. On this machine a revolving cutter opens a trench 4 inches wide, 8 inches deep. Removed soil is pulverized and placed at one side. The shoe holds trench open, guides the plant roots and loose soil is returned to trench and firmed by drive wheels. Powered by an 80-horse power engine, the machine plants 52,000 seedlings a day. Two such machines are required to handle our Spring plantings.



It's Patriotic to Make "America More Fruitful"



# Greening's

## ORNAMENTAL SHRUBS

From the Golden Forsythia of early Spring with its unusual contrasting yellow to the blazing bronze foliage and sparkling berries of late Fall, ornamental shrubs offer a useful, practical means of dressing-up the home grounds. They lend themselves to the most formal garden, or to bring colorful privacy to a favored nook. Properly planted, with little attention, they bring delicate flowers in many colors, sparkling berries and foliage color changes that delight every eye. The varieties offered represent standards of excellence and are guaranteed entirely satisfactory.



Buddleia, Ile de France

### AMELANCHIER – Shadblow

**Amelanchier canadensis** (Downy Serviceberry). An attractive shrub sometimes growing to a bushy tree 30 ft. high. Has beautiful snow-white flowers early in Spring. After blooming, leaves with dense growth of woolly hairs giving a silvery cast, appear. Following leaves, the bushes bear a profusion of edible red berries. Grows in any good soil and is tolerant of shade.

### ARONIA – Chokeberry

A useful shrub for grouping in wild gardens. They are not particular as to soil and are tolerant to shade. Thrive best in rich soil rather moist. Both species listed below bear clusters of white flowers early in Spring followed by ornamental berries.

**Aronia arbutifolia** (Red Chokeberry). Grows to 10 ft. and bears a profusion of red berries which remain colorful most of the Winter.

**A. brilliantissima** (Brilliant Chokeberry). Same growing habits as Red Chokeberry, except that the Fall coloring and foliage is much more blended. Foliage changes from brown-green to flaming red.



Berberis Thunbergi

### ARALIA

**Aralia acanthopanax pentaphyllum** (Angelica Tree). A pretty Japanese shrub of medium size and rapid growth with branches of arching habit furnished with spines. Pale green flowers blooming in June. Grows to 8 ft. in any good soil.

### BERBERIS – Barberry

Deciduous, spiny shrub equally suitable for specimen or hedge plants, ranks among the best of berried plants, easy to cultivate and adapt to various soils and situations. Does extremely well in shade. Excellent for planting around evergreens as a barrier against dogs. Foliage is brilliant flame red in Fall and showy berries hang on well into Winter.

**Berberis thunbergi** (Japanese Barberry). From Japan. An attractive species of dwarf habit, small foliage, changing to a beautiful coppery red in Autumn. Valuable as an ornamental hedge or specimen. Beautiful red berries in Winter.

**B. thunbergi atropurpurea** (Redleaved Barberry). This is an exact reproduction of the Japanese Barberry except that where the original is a deep green from Spring until Fall, this variety starts its first foliage a warm bronze red. The heat of Summer intensifies its red brilliancy and Autumn adds other tints to its richness. The abundant scarlet berries persist throughout the Winter.

**B. thunbergi minor** (Box Barberry). A dwarf, upright form of the popular B. thunbergi. It lends itself most happily to low edgings for formal gardens when set from 4 to 6 in. apart and kept trimmed. The foliage is a pleasing light green changing in Autumn to rich reds and yellows.

### BUDDLEIA – Butterflybush

Because of the color and style of flowers growing in profusion of long racemes, this shrub is sometimes called the Summer Lilac. Butterflies are attracted to plants in the garden which adds to its interest. Two of the best species are listed. Delight in rich, well drained soil in sunny locations.

**Buddleia magnifica** (Oxeye Butterflybush). Large, beautiful lavender flower, with pronounced orange borne on long center spikes. Year's growth dies down and new shoots each Spring obtain a height of 3 to 6 ft.

**B. Ile de France**. The outstanding Butterflybush. Extremely fragrant, deep violet flowers of darkest hue blooming from July to September. Variety is inclined to be dwarf in growth habit.

### CALYCANTHUS

**Calycanthus floridus** (Common Sweetshrub). Highly ornamental shrub growing as well in shade as in open locations. Prefers rather rich, moist soil. Grows to a height of 6 ft. or more, open in habit. Extremely favored for its aromatic fragrance of wood. Flowers in June and at intervals throughout season of rare chocolate color; spicy fragrance.

Outdoor Adornment Makes a House a Home





Calycanthus (Sweetshrub)

- C. sanguinea** (Bloodtwig Dogwood). A distinctive species with dark red branches and leaves of deep red in the Fall. Greenish-white flowers May and June and black fruit. Grows 6 ft. in height. Has a preference for wet soil.
- C. stolonifera** (Red-osier Dogwood). Rarely grows above 6 ft. Erect red branches, spreads underground, thus makes large clumps. Flowers white, small in flat top clusters. Fruit bluish-white.
- C. stolonifera flaviramea** (Yellowtwig Dogwood). Same general type as Red-osier except with white flowers; bluish berries but has yellow twigs.

### CORYLUS

- Corylus americana** (American Hazelnut). Useful and desirable shrub, having upright branches growing to a height of 8 ft. Bears edible nuts properly known as Filbert or Hazel nuts. Long, pendulous catkins in early Spring and golden foliage in Fall. Thrives in any good and well-drained soil.

### COTONEASTER – Rockspray

An important group of garden shrubs of Rose family. Widely planted for ornamental purposes. Thrives in open, sunny position and well drained soil.

- Cotoneaster acutifolia** (Peking Cotoneaster). A variety particularly desirable for its reddish flowers and black fruits. Very desirable for its vigorous growing habit and blended leaf coloring. Grows to height of 12 ft.



Deutzia, Lemoine

### CLETHRA

**Clethra alnifolia** (Cinnamon Clethra or Sweet Pepperbush). One of the few shrubs that bloom profusely in the heat of Summer. July and August. Does best in rather moist, lime-free soil mixed with peat or leafmold. Upright growing to 10 ft. White flowers on erect racemes, tolerant to shade.

### CORNUS – Dogwood

Very popular ornamental shrub serving many useful purposes in garden and landscape plantings. Very colorful in Fall and are noted for their bright effect of their color stems in Winter. All species have flowers and fruits, thrive in almost any soil and do as well in shade as in sunny locations.

**Cornus alba** (Tartarian Dogwood). Showy shrubs 6 to 8 ft. high. Twigs bright red, oval leaves, bluish green beneath white flowers in numerous clusters. Fruit bluish white turning to almost black. Blooms May and June.

**C. alba elegantissima** (Silverblotch Dogwood). A highly decorative species with light green leaves having wide, silvery edges. Blood red branches in Winter time adds to its attractiveness. Grows to 5 to 7 ft.

**C. alternifolia** (Pagoda Dogwood). A blue Dogwood also called pigeon berry. Grows as a shrub or small tree 8 to 15 ft. high, whorled branches in horizontal tiers giving it a most decorative appearance. White flowers in clusters followed with bluish fruit. Blooms in May and June.

**C. paniculata** (Gray Dogwood). Shrub 6 to 10 ft. high with gray twigs, white flowers in clusters, June and July followed with white fruit on red stems which are colorful long after the fruits have gone.

**C. mascula** (Cornelian Cherry). Beautiful large shrub growing to a height of 20 ft. Has clusters of yellow flowers later covering the bush in Spring before the leaves appear. Later the shrubs bear bright red, edible fruit resembling Cherries.



Clethra Alnifolia

**Cotoneaster divaricata** (Spreading Cotoneaster). A dense, widespreading bush to 6 ft. with shining, dark green leaves. Blooms in early Summer with small pink flowers, later loaded with bright red berries.

**C. faveolata**. A species with reddish flowers and black fruit. Brilliant orange and scarlet leaf coloring in Fall. Vigorous in growth habit to about 12 ft.

**C. horizontalis** (Rock Cotoneaster) (See **Broadleaf Evergreens**).

### CYDONIA JAPONICA – Flowering Quince

**Cydonia japonica** (Dwarf Japanese Quince). A popular specimen also planted widely as hedges. Grows to only 3 ft. in height. Spiny branches producing flowers with the first leaves in Spring of brick red with Quince light yellow, aromatic fruit in Fall. Fruit is not edible raw, but is sometimes used for jelly or putting in drawers to perfume bedding or clothing.

"Born 1850 Still Growing" Another Way of Saying—Age—Stability—Progress



**DESMODIUM**

**Desmodium rubrum** (Lespedeza bicolor). The Desmodium is mostly listed as a perennial, as it dies down in Winter, but is perfectly hardy. It is valuable for planting in front of shrubbery and its long, drooping racemes of purplish rose flowers are distinctly ornamental.

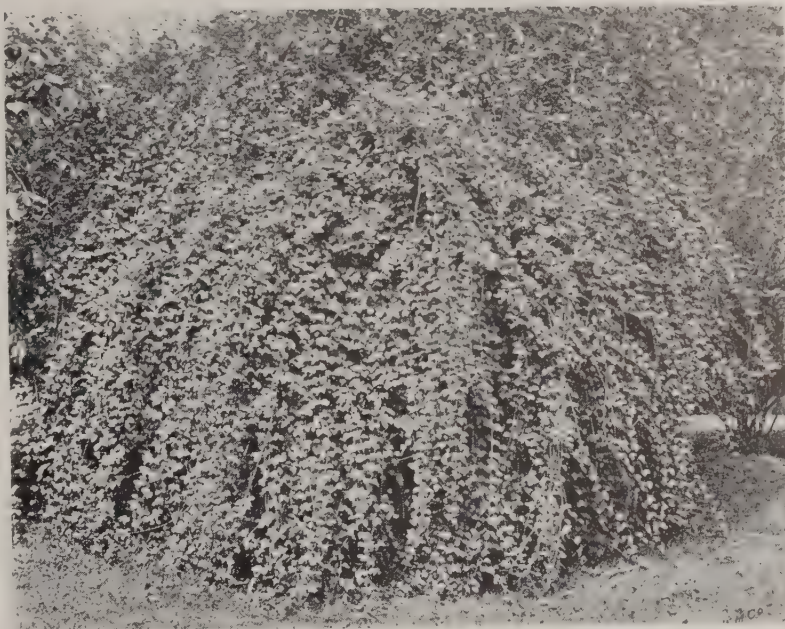
**DEUTZIA**

An attractive shrub in early Summer because of their wealth of flowers. Mostly white, some tinged with pink. They do best in well drained soil with plenty of humus. Should be planted in a protected position.

**Deutzia gracilis** (Slender Deutzia). One of the best of the dwarf shrubs growing low and dense. Not more than 3 ft. high; have racemes of white flowers borne on graceful arches and branches.

**D. Lemoinei** (Lemoine Deutzia). Hybrid species growing to a broad, rounded bush about 5 ft. high with large clusters of white flowers. One of the hardiest varieties.

**D. Pride of Rochester** (Pride of Rochester Deutzia). Another hybrid species, vigorous growing with double white flowers shaded pink on the outside, borne in early June. A distinct and valuable variety growing to about 8 ft. high.



Forsythia Suspensa (Weeping Golden Bell)

**ELAEAGNUS**

**Elaeagnus angustifolia** (Russian Olive). A dense-growing, hardy deciduous tree or shrub growing to a height of 20 ft., with small, gray-green leaves, silvery beneath. Excellent for dense masses or for screen and windbreak purposes. In early Summer has double flowers which emit a delightful, spicy fragrance.

**E. argentea** (Silver Berry). Attractive and distinctive ornamental shrub with silvery fuzzy leaves. Fragrant flowers followed by silvery fruit. Grows to 12 ft. See color plate, page 36.



Fruit of Elaeagnus Angustifolia

**EUONYMUS – Spindletree**

Deciduous shrubs or small trees. Gorgeous in its Fall coloring of foliage. Upright varieties listed below while low-spreading varieties will be found under Broadleaf Evergreens.

**Euonymus alatus** (Winged Euonymus). A wide-spreading deciduous shrub to 8 ft. or more. Distinguished by its wing branches. The leaves turn old rose to flaming crimson in Fall and when these have fallen, small but numerous bright colored fruits are conspicuous. Widely used in borders or massed plantings or planted singly.

**Euonymus alatus compactus**. Dwarf form of the above variety. Very useful in border planting as it is of low, compact growth. Fine also where small specimen plants are desired. See color plate, page 36.

**E. americanus** (Brook Euonymus, or Strawberrybush). Grows to a height of 5 to 8 ft., showy in Fall with pink, warty fruits and scarlet covered seeds. Thrives in partial shade and rather moist soil.

**E. europaeus** (European Burningbush). A deciduous shrub or tree growing to a height of 25 ft.; very showy in the Fall with smooth, pinkish red fruits. Hang like Christmas tree ornaments all over the bush as Winter advances. These fruit buds break open displaying bright scarlet heads.

**E. yedoensis** (Yeddo Euonymus). A tree-like shrub with stiff, upright branches forming a round top. Has greenish flowers and rose-colored fruits which remain long after leaves have fallen.

**FORSYTHIA – Golden Bell**

Hardy deciduous shrub with a wealth of brilliant yellow flowers appearing before the leaves. They are among the showiest of Spring flowering shrubs. Forsythias are not particular as to soil and do well in partial shade as well as in open. They have an excellent foliage value with slender, clean looking leaves, being carried late into the Fall and sometimes becoming handsomely olive or purplish in color. Four of the best species are offered by Greening.

**Forsythia intermedia** (Border Golden Bell). A hybrid of the Forsythia suspensa with slender, arching branches and dark green, lustrous leaves. One of the first to bloom in the Spring. Grows 8 to 10 ft.

**F. suspensa** (Weeping Golden Bell). A species growing to 8 ft. or more with slender branches often bending to the ground and rooting at the tip. In bloom it forms a golden yellow mound and can be trained over a trellis walk or wall effectively.

**F. suspensa fortunei** (Fortune Golden Bell). A vigorous, upright grower finally developing into arching branches. Very conspicuous in appearance—its golden flowers continuing a long time. Height 8 to 10 ft.—making a splendid plant for borders.

**F. suspensa spectabilis** (Showy Golden Bell). The most prolific bloomer of all Forsythias having the largest and showiest flowers. Foliage is deep green, flowers deeper yellow than other varieties. Grows to a height of 8 ft. Compact, erect and dense in form.



Hibiscus (Rose-of-Sharon)

Let Greening Experts Help You Plan Your Planting—Write to Us



### HAMAMELIS – Witch-hazel

**Hamamelis virginiana** (Common Witch-hazel). Fringe like yellow flowers open late in Fall. Grows 10 to 15 ft. tall, with fine leaves that color yellow, orange or purple in Fall. Likes a moist, sandy or peaty soil and partial shade.

### HIBISCUS – Rose-of-Sharon

The Althea Rose-of-Sharon in shrub and tree form is valued for its late flowering season of colorful flowers ranging in color white to pink and red to bluish purple. The flowers are large, Hollyhock-like in form and appear when most other shrubs have finished blooming.

**Hibiscus syriacus** (Shrub Althea Rose-of-Sharon). A tall, rounded form of shrub desirable for specimen planting on lawns and in gardens and sometimes is double blossoming. Blooms in various colors—white, pink, red, blue and purple. Specify color in ordering.

**H. syriacus** (Treeform Rose-of-Sharon). Has the same varieties of color as the shrub form, but is grown and cultivated with a single stem to form the shape of a small tree. A most handsome, specimen ornamental plant furnished in the following named varieties:

**Ardens** (double violet).

**Boule de Feu** (double purplish red).

**Jeanne d'Arc** (double pure white).

**Coelestris** (sky blue).

**Totus albus** (single white).

### HIPPOPA (See **Rhamnus**) (**Buckthorn**)

### HYDRANGEA

One of the showiest of flowering deciduous shrubs valued for their large clusters of showy white, pink or blue flowers which last throughout the Summer, gradually changing color as the season advances. Thrives best in rich moist soil, flower freely in an open situation. Should be severely pruned, weak growth thinned, to encourage strong shoots of good flower heads.

**Hydrangea arborescens grandiflora** (Snowhill Hydrangea).

This superbly Hydrangea is of easy culture, and is an exceedingly prolific bloomer. Color is pure white, which is retained usually from four to five weeks. The flower clusters remain intact long after the leaves have fallen and frequently throughout the following Winter. Blooms first season. Should be cut back severely in Spring.

**H. paniculata grandiflora** (Panicked Hydrangea). Familiar to almost everyone as the most conspicuous shrub in any collection during August and September. Its massive plumes of white flowers bend the branches with their weight, changing finally to pink and bronzy green. The shrub shows to best advantage when grown in rich beds or masses and cut back



Hydrangea

severely every Spring before growth starts. Grown in this way, it produces fewer flower-heads but much finer ones. Needs close pruning and good fertilization in order to produce choice flowers.

**H. quercifolia** (Oakleaf Hydrangea). A handsome, low spreading shrub with attractive, large leaves which turn wine color in the Fall, resembling the Oakleaf. Flowers open in Summer in long panicles, which finally turn purple. An excellent plant for low under planting in the shade.

**H. Tree Form** (Treeform of Panicle Hydrangea). A splendid specialty. Free flowering. Grows into fine tree shape, often 7 to 8 ft. in height.

### HYPERICUM – St. Johnswort

**Hypericum aureum** (Golden St. Johnswort). A showy shrub of stiff, dense habit, dwarf form, growing to about 3 ft. in height. Has unusually attractive foliage and large, brilliant yellow flowers late in the Summer from August to October. It likes well drained soil and blooms longer in partial shade. Useful for edges or shrub borders. See color plate, page 36.

### ILEX – Holly

**Ilex verticillata** (Common Winterberry). A hardy, ornamental shrub with upright branches and light green foliage developing bright, scarlet red berries which remain on the open branches until Midwinter. Grows to an ultimate height of 6 ft. Prefers moist soil but grows well under variable conditions.

### KERRIA

**Kerria japonica**. A Chinese deciduous shrub belonging to the Rose family, growing to a height of 8 feet. Not particular as to soil, but prefers a well-drained and sheltered position while in partial shade. Light green, twiggy stems which are very decorative in Winter. Blooms with yellow, rose-like flowers borne in June sometimes scattering blooms throughout the season. See color plate, page 37.

### KOLKWITZIA

**Kolkwitzia amabilis** (Beautybush). An oriental deciduous, upright shrub belonging to the Honeysuckle family. Grows to 5 to 8 ft. and is particularly graceful habit; good foliage value and soft yellow pink flowers making it appropriately named Beautybush. Young leaves and branches are hairy when young and well established in its location, it becomes one of the freest and loveliest of flowering shrubs. Blooming in May and June. Flowers are distinctive with white, bristly hairs. Grows in poor soil in an exposed location.

### LESPEDEZA (See **Desmodium**)

### LIGUSTRUM – Privet (See **Hedges**, page 23)



Kolkwitzia (Beautybush)

Knowing What to Plant and Where to Plant, Brings Beauty, Saves Money



**LONICERA – Upright Honeysuckle**

A group of very desirable shrubs, valued for their showy, often fragrant flowers, and decorative fruit. They are easy to cultivate and not particular as to soil. In general prefer open, sunny situations, although some do well in partial shade. Shrub forms are valuable for use in mixed shrub plantings or for screening purposes, some attaining large size if grown as a single specimen with ample room for development.

**Lonicera fragrantissima** (Winter Honeysuckle). A stout, half evergreen shrub growing to 8 ft., handsome, leathery leaves. It is valued for its sweet-scented, creamy-white flowers in early Spring and its leaves which remain green well into Winter. Prefers an open, sunny location.

**L. morrowi** (Morrow Honeysuckle). An attractive, wide-spreading shrub of distinctive habit growing to 8 ft.; flowers white-yellow and blood red fruit. The leaves hang on and continue green until late Fall. Because of its spreading habit and vigorous growth, it is much used on slopes.

**L. korolkowi** (Blueleaf Honeysuckle). A most distinctive form of the bush type of Honeysuckle, because of its attractive blue-green and light pink flowers. Grows to a large rounded bush up to 12 ft.

**L. maacki** (Amur or Late Honeysuckle). The last Honeysuckle to come into bloom. A stout, upright grower to about 15 ft. with large, dark green leaves. Has very conspicuous, large, white-yellow flowers followed with dark red fruits, ripen in September. An excellent variety for trees and mixed shrub borders.

**L. tatarica alba** (White Tatarian Honeysuckle). One of the best known of the Honeysuckle family. Bears a profusion of creamy white flowers, followed by dark red fruit. Blooms in May and June, fast growing to a height of 8 ft. Adaptable to many kinds of soil and tolerates some shade.

**L. tatarica rosea** (Tatarian Honeysuckle, Rosy). Another species of the Tatarian Honeysuckle but with flowers, rosy-pink outside and paler within, followed by dazzling red fruit.



*Cotoneaster Divaricata* (See page 30)



*Euonymus Alatus* (See page 31)

See Page 46 for

**GREENING'S  
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*Deutzia Gracilis* (See page 31)

**PHILADELPHUS  
Mockorange**

Deciduous shrubs, mostly medium in size, valued for their great display of white or creamy flowers in the early Summer. They are not particular to soil, providing that it is not soggy or poor, and stand shade better than most flowering shrubs. Available in several varieties.

**Philadelphus coronarius** (Sweet Mockorange). The most fragrant of all Mockoranges with creamy-white flowers completely covering it in June. Grows to a height of 8 ft. and one of the first to flower in season.

**P. coronarius aureus** (Golden Mockorange). A vigorous, large growing shrub, spreading branches 8 to 10 ft. tall. Flowers are slightly scented, borne in dense racemes, a little later than other Mockoranges. Brilliant yellow foliage holding its color well into the season. Good for contrast with dark leaf shrubs.

**P. grandiflorus** (Big Scentless Mockorange). A hybrid origination of Mockorange and one of the most handsome of the larger kinds with

clusters of pure white flowers often 3 in. across, slightly fragrant. Adaptable to various soil conditions. Exceptionally hardy and free from diseases.

**P. lemoine** (Lemoine Mockorange). A smaller type shrub with slender branches, fine leaves and producing an abundance of small white flowers which makes them seem like a large bouquet in June and July. It is a highly desirable type for a low growing shrub or in locations where a shrub not exceeding 5 ft. is desired.

**P. virginalis** (Virginal Mockorange). A very popular hybrid Mockorange. Has waxy, semi-double flowers, growing to the largest size and most fragrant of all Mockorange. Blooms for a long period. The shrub sometimes reaches 10 ft. in height and has rather large, light green leaves. Particularly desirable plant for specimen purposes.

**P. Mont Blanc** (Mockorange). A charming variety of Mockorange of the dwarf habit, having very large, single snow-white flowers, exceptionally fragrant. Produces in great abundance. Grows to a height of about 5 ft.

Our Landscape Department is at Your Service at Any Time and Glad to Cooperate with You



## Greening's LILAC (Syringa)

The most colorful of all shrubs today as for generations, Lilacs are among the most prized of all flowering shrubs. As specimens in ornamental shrubs, few equal in beauty. Where space is adequate, they are excellent for screens or hedges. They serve as a background for smaller shrubs. The French Lilac has long been a specialty of the Greening Nursery, and is available in many unusual strains and double varieties which far surpass the commonly known species as well as the imported varieties listed on this page. They are thoroughly tested as to hardiness, ease of growing, and beauty and profusion of flowers. Can be grown very successfully in any good soil. Require but little care and are mostly immune to disease.

### Common Varieties

**Syringa chinensis rubra.** A natural hybrid created by a cross between the Common Lilac and the Persian. Grows to 12 ft. in height, with slender, often arching branches. Very free flowering with deep, purplish-red flowers; early in the season.

**S. persica** (Pink Persian Lilac). A slightly smaller growing shrub than the Chinensis, growing to 10 ft., with slender branches of graceful habit. Very showy in bloom with large loose colors of pale pink color.

**S. villosa.** An upright, strong growing species of Lilac obtaining a height of 10 ft. Leaves are deep green with whitish undercolor. Flowers are lilac pink or paler and borne in terminal clusters after most of the common Lilacs have passed.

**S. vulgaris** (Common Violet Lilac). The best known of all Lilacs. Grows to a large shrub of dense, upright habit to 20 ft., with bluish-purple, colored flowers of exquisite fragrance.

**S. vulgaris alba** (Common White Lilac). The common white form as above with same habits and type of growth.



Syringa vulgaris (Common Lilac)



Double Flowering French Lilac

### French Lilacs

#### SINGLE FLOWERING

**Syringa Charles X.** A rapid growing variety with large, glossy leaves and produces single flowers of reddish-purple.

**S. Congo.** A dark purplish-red flower of this sort give it distinction. Panicles are long, flowers are large, making it outstanding.

**S. Ludwig Spaeth.** Large individual flowers of dark purplish-red on long panicles; one of the best varieties.

**S. Marie Legraye.** A pure white variety of single flowering type on large panicles. One of the finest of the white sorts.

**S. Vulcan.** Bright ruby-red flowers of this type give it distinction among the best of the Lilacs.

#### FRENCH LILACS—DOUBLE FLOWERING

**Syringa Alphonse Lavallee.** One of the newer varieties; preferred of the double flowering sorts. Flowers of bluish-lilac.

**S. Charles Joly.** A variety with double dark colored purplish, wine-colored blossoms make it one of the most attractive of the French Hybrid sorts.

**S. Mme. Casimir Perier.** A variety that is excellent for cut flowers, producing double cream-colored flowers of high fragrance.

**S. Marie Lemoine.** One of the most popular of the white varieties of French Hybrid Lilacs producing double white flowers.

**S. President Grevy.** Very desirable variety, producing large, full clusters of double dark blue flowers.



Syringa, President Grevy

"Bud Selection" has Established a New High in Fruit Tree Quality



**PHYSOCARPUS – Ninebark**

**Physocarpus opulifolius** (Ninebark). An unusually fine shrub for mass or specimen planting. Showy white flowers in June, borne on strong, spreading branches followed by attractive seed pods in the Fall. Does well in any location including partial shade. Grows 8 to 10 feet high. See color plate, page 37.

**PRUNUS – Almond Plum**

The Prunus family includes a group of Peach, Almond, Cherry, and Plums, and includes the orchard fruits as well as the decorative deciduous shrubs and small trees. The two types of Flowering Almond and one type of Cherry growing in shrub form are listed below. Types growing in tree form will be found on page 38. The varieties offered are the hardiest kinds, very showy when flowering in Spring and thrive best in well drained, loamy, limey soil. To avoid injury by late frost, it is advisable to plant them in northern exposures where they will be less likely to start in to grow and blossom early.

**Prunus japonica florepleno alba** (Double Whiteflowering Almond). One of the showiest of the early Spring blossoming shrubs, flowering before the leaves appear. Small, double white flowers line the twigs and bloom over a long period of time following the Forsythia in bloom. Grows 3 to 4 ft. in height.

**P. japonica florepleno rubra** (Double Pinkflowering Almond). A shrub of the same habit as the white flowering type blooming early in May before the leaves appear with an abundance of small, double, rose like pink flowers, closely set along the twigs, creating a beautiful massed effect. Shrub grows to 3 to 4 ft. in height and is adaptable both for specimen plants or for foundation planting.

**P. tomentosa** (Nankin Cherry). A beautiful shrub growing to 6 ft. in height and especially suited for borders, specimen groups and foundation plantings. Before the full leaves appear, produces an abundant bloom of pinkish flowers followed with a brilliant, red edible fruit, similar to but smaller than the sour Cherry. An exceptional popular shrub abroad, gaining favor in America.

**RHAMNUS – Buckthorn**

**Rhamnus frangula** (Glossy Buckthorn). A handsome shrub with glossy leaves and showy berries; make beautiful hedges, shiny, dark green leaves, red fruit which finally turns black. Spreading branches make it especially attractive and useful in mixed borders. Grows to a height of 10 ft. in most garden situations and is particularly adaptable to where it will get some shade and moist soil.

**RHODOTYPOS – Jetbead**

**Rhodotypos kerrioides** (Jetbead). A shrub especially valuable for planting in dry and partially shaded soil where other plants often fail. Bears white flowers on branch ends more or less continuously until frost. It is outstandingly noticeable in the Fall with its clean, bright leaves, are still on when other leaves have fallen. Attractive in the Winter, with its black berries which hang on until Spring. Trouble-free and widely used in general plantings.

**RHUS – Sumac**

A type of shrub grown chiefly for its handsome foliage which takes on a brilliant coloring in the Fall. Useful for border or for massing in naturalistic effect. Exceptionally hardy and does quite well on dry banks.

**Rhus canadensis** (Fragrant Sumac). A low spreading shrub, one of the best cover plants for dry, rocky slopes. It has highly aromatic, three-part leaves, produces short spikes of yellow flowers in the Spring and red, hairy fruit. Foliage changes to a rich bronze-green in the Fall.

**R. copallina** (Shining Sumac). A large growing shrub, often to 30 ft. which is conspicuous for its dark green, glossy leaves which change to crimson in Autumn. Produces greenish-yellow flowers in August.

**R. cotinus** (Common Smoketree). A much admired shrub for its curious fringe or hair-like flowers that cover the whole surface of the plant in Midsummer. It creates an effect of mystic clouds entirely covering the plant. Handsome foliage adds its share to the plants of beauty. Likes plenty of sunshine and light, well drained soil. Grows to a height of 10 to 12 ft. and its spreading habit requires considerable space. Especially desirable as a specimen plant.

**R. glabra** (Smooth Sumac). Grows to a height of 15 ft., with smooth, bloomy skin, particularly handsome in the Fall because of its bright red foliage and scarlet fruit heads.



Prunus (Flowering Almond)

**SALIX**

**Salix discolor** (Pussy Willow). A shrub or small tree growing to 20 ft., well known for its silvery catkins or pussies which emerge from the shiny, brown Winter scales long before the leaves appear and one of the first indicators of Spring. Unusually hardy, a plant worthy of being more extensively planted for ornamental purposes.

**SAMBUCUS – Elder**

A highly prized ornamental shrub bearing showy blossoms, producing edible fruit, popular for wine making and for combining with Apples in pies. The berries are also attractive to birds. Very effective when planted in groups and are not particular as to soil or location and do especially well in partial shade, in rich, moist soil.

**Sambucus canadensis** (American Elder or Sweet Elder). A shrub growing to a height of 12 ft. bearing panicles of white flowers in June, followed by reddish-purple berries in Autumn. Flower clusters often reach 10 in. across.

**S. nigra** (European Elder). Grows to 30 ft. and bears yellowish white flowers in clusters to 8 in. across followed by shiny black berries in September. Fruit has some medicinal value as well as use in wine making and cooking.

**S. nigra aurea** (Golden European Elder). A variety of the European Elder which has the same attractive habits of growth and use except with handsome, golden-yellow foliage. A valuable plant for enlivening shrub plantings.

**SPIRAEA**

A large group of deciduous shrubs belonging to the Rose family. They are mostly small and medium sized shrubs of good habit and very profuse bloomers. White being the dominant color of flowers. The early flowering group is white, while the late flowering group comprises some of pink or reddish flowers. Those bearing white flowers should be pruned right after flowering. Pruning consisting of cutting out old wood rather than cutting back. Those of the late flowering group are best cut back fairly hard in the Spring, bearing their flowers on the new growth. Spirea prefers sunny position and will grow in any good soil. Thrive best in rich, moist loam.

**Spiraea Anthony Waterer**. One of the late flowering species; dwarf, and compact habit, bearing crimson flowers. Grows to a height of about 2 ft. Flowers in corymbs, 3 in. across. Blooms through the Summer and Fall. A popular type of shrub for use in front of higher shrubs in foundation border plantings.

**S. arguta** (Garland Spirea). An early flowering species, growing to a height of about 6 ft. with white, slender branches. Blooms early in May with small white flowers which completely envelop the plant. In Fall, the deep green leaves become very colorful.

"The Beautiful in Nature is an Educator"





Elaeagnus Argentea (See page 31)

## SYMPHORICARPOS – Snowberry

A group of shrubs especially easy to grow because of their adaptability to almost any soil conditions. Thrive equally well in the sun and shade. The flowers are rather inconspicuous with clusters of fruits early in the season; are highly decorative. Excellent for in front or shrub borders or underplantings.

**Symphoricarpos chenaulti** (Red Snowberry). A new variety with dainty, arching branches and small leaves, spotted with small, coral-colored berries in early Fall. Fine for planting in front of tall or coarse growing shrubs. Grows to a height of about 6 ft.

**S. racemosus** (Common Snowberry). A well known shrub producing small pink flowers and large white berries in clusters that remain on the plant through the Winter. Its small, white berries are its most attractive characteristics. Large leaves and grows to 6 ft.

**S. vulgaris** (Coralberry). A shrub similar in habit of growth to the Snowberry except that the berries are smaller and red in color. It is slightly drooping in nature and holds its berries late in the season. Handsome foliage stays green longer than is common. Grows to a height of 6 ft. Sometimes it is known as the Indian Currant.



Euonymus Alatus Compactus (See page 31)



Hypericum (See page 32)

## SPIRAEA—Continued

**S. billiardi** (Billiard Spirea). A late flowering species with exquisite beauty, having tall spikes of deep pink flowers. Blooms in July and August when most other shrub blooms have faded. Can be used for cuttings. Leaves are bright green above, pale beneath. Particularly suitable for moist locations.

**S. callosa alba** (Spirea japonica). Another late flowering variety of a dwarf habit. Bushy, upright, growing to about 4 ft., with flat clusters of pink flowers and green foliage.

**S. froebeli** (Froebel Spirea). A shrub that resembles the Spirea Anthony Waterer, but grows to a much larger size and more vigorous. Has deep pink cluster of flat top flowers borne in July. Broad leaves, suitable for moist locations.

**S. prunifolia florepleno** (Bridalwreath). About the earliest of the double Spireas to bloom with very graceful and plume-like white flowers sweeping outward in gentle curves. Flower clusters loading the stems bending them with their weight. Dark green leaves, lasting late in Fall. Exceptionally hardy, growing to 6 ft. in height.

**S. thunbergi** (Thunberg Spirea). One of the first to bloom of the early flowering species, often before Spring has really arrived. It is a twiggy shrub, growing to 5 ft. with slender, arching branches and feathery bright green leaves which turn orange to scarlet in Fall. Flowers are pure white, creating a dense, feathery white bush. Some are dwarf habit and serve many purposes in landscape plantings.

**S. trichocarpa** (Korean Spirea). Early flowering type following Vanhoutte in bloom. Grows to a dome-shaped bush about 6 ft. in height. Makes a handsome specimen. Flowers are distinctly marked in the center, relieving the dead white effect. One of the most valuable new shrubs introduced in the past decade. Highly recommended for general planting.

**S. vanhouttei** (Vanhoutte Spirea). One of the most popular and most charming of the Spirea, blooming early with pure white flowers; clusters of panicles along the twigs, weighting the branches to graceful arching effect. Profuse in blooming, vigorous and hardy. A grand shrub for planting singly or in groups and borders. Especially desirable for banking against buildings. Hardy and adaptable in many locations, growing to 6 ft. in height.

## TAMARIX

The graceful habit and unusual appearance of the Tamarix with long, slender branches and leaves, make them very attractive. They bear small, pink flowers on loose racemes or panicles giving the plants a feathery appearance. In gardens it is best to keep them in bushy form by annually cutting back the long growth. The hardiest varieties are offered.

**Tamarix africana** (African Tamarix). One of the most popular of the species with bright pink flowers and slender racemes before the leaves appear in April and May. Shrub grows to 15 ft. tall and is very showy with its reddish bark.

**T. hispida** (Kashgar Tamarix). A dwarf type species which does not grow over 4 to 5 ft. in height. Has hairy twigs and bears pink flowers in dense racemes suitable for cutting in August and September.

**T. pentandra** (Fivestamen Tamarix). A species which grows 10 to 15 ft. high with purplish foliage. Flowers pink or rose pink mostly in dense racemes which groups in large terminal clusters, making them suitable for cutting in August and September.

Trees and Flowers Arouse Our Most Tender Sympathies and Lovable Emotions



## VIBURNUM

The Viburnums are our most useful shrubs, being hardy, of good habit, bearing handsome flowers in Summer, followed by showy fruits, and should be in every garden. The foliage is most striking throughout Summer and Fall. They thrive exceptionally well in shady, wet places where other shrubs fail but are equally well at home in the bright sunshine.

**Viburnum americanum** (American Cranberry Bush). Similar to *Viburnum opulus*, but habit more open and spreading. This is a handsome native shrub, very decorative brilliant red fruit which begins to color in July, remaining on branches and keeping its color until the following Spring. Grows to 8 ft.

**V. carlesi** (Fragrant Viburnum). An early-flowering Viburnum of fine habit, bearing highly fragrant, white flowers in May with the aroma of cloves, being one of the first shrubs to flower. Leaves blue green and blue-black berries. We consider this one of the most important introductions of recent years. Grows 3 to 5 ft.

**V. cassinoides** (Withe-rod). Bears short cymes or clusters of white flowers followed by black berries in Autumn. Handsome foliage. Grows 8 to 12 ft.

**V. dentatum** (Arrowwood). Flowers greenish-white, in long clusters. Fruit blue-black. One of the best shrubs for massing for foliage effect. Grows 10 to 15 ft. high.

**V. lantana** (Wayfaring-tree). A large, robust-tree-like shrub with soft, heavy leaves and large clusters of white flowers in May, succeeded by red fruit later turning black. Retains its foliage very late. Grows 10 to 15 ft.

**V. lentago** (Nannyberry, or Sheep Berry). Flowers creamy-white, very fragrant; foliage a light, glossy green. A tree-like shrub growing 20 to 30 ft. high.

**V. opulus** (European Cranberrybush). A shrub growing 8 to 12 ft. high, both ornamental and useful. Its red berries, resembling Cranberries, esteemed by many, hang until destroyed by frost late in the Fall.

**V. opulus nana** (Dwarf Cranberry Bush). A very dwarf, compact form of *Viburnum opulus*, seldom growing over 18 in. high. Very formal growth.

**V. opulus sterile** (Common Snowball). A well known favorite shrub, growing 10 to 12 ft. high, with globular clusters of pure white, sterile flowers the latter part of May. One of the showiest of flowering shrubs.



*Physocarpus Opulifolius* (See page 35)

## WEIGELA—Continued

**W. rosea** (Pink Weigela). An elegant shrub, with fine, rose-colored flowers, of erect, compact growth, blooming in June. Grows 8 to 10 ft. high, with rather spreading branches. Flowers rose-pink and does best in full sun.

## PRUNING FLOWERING SHRUBS

Flowering Shrubs come under two headings, those that flower in the Spring and those that bloom any time after June. The late bloomers must be pruned only in Winter or early Spring. For the most part, they flower largely on the wood made the same season. By trimming or pruning in the Spring, new wood that will duly flower is encouraged. Early Spring-bloomers, on the other hand, largely flower on the wood made the previous season. To prune any time after the leaves fall would mean the removal of much flowering wood. Immediately after flowering is finished is the time to prune or trim Springflowering shrubs.

They should not be trimmed like a Privet hedge. The habit of each shrub must be studied. If naturally prone to sending up new growths from the base, cut away old wood near the ground line. Shrubs with a branching habit should be pruned less vigorously, but at the same time sufficiently to prevent overcrowding of the growths. All deciduous trees and shrubs should be well cut back or pruned at planting time. Damaged and long, straggly roots should also be trimmed off clean.



*Kerria Japonica* (See page 32)

## WEIGELA

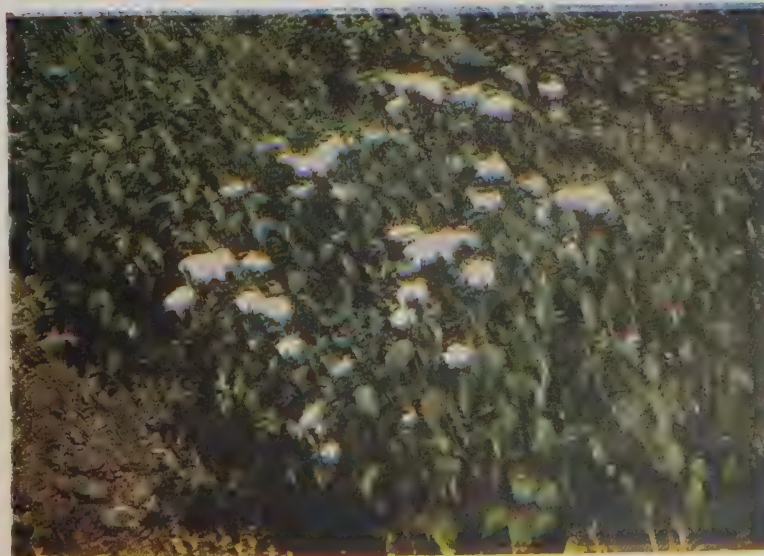
A very handsome, popular shrub, blooming mostly in May and June. Weigela is of the Honeysuckle family, but differs in the larger and much more showy flowers. Exceptionally showy and of the easiest culture. Grows in any ordinary garden soil. The following are among the most desirable varieties.

**Weigela, Abel Carriere.** A highly prized species bearing flowers of rose-carmine in bloom, purple-carmine in bud, with yellow spot in the flower give it a distinctive appearance. It usually flowers the entire Summer.

**W. candida** (Snow Weigela). Considered the best of the white flowering variety. Has light green leaves and beautiful white flowers which bloom profusely early in the season. Exceptionally hardy variety growing to 6 ft.

**W. Eva Rathke.** One of the most popular of the hybrid species and considered the best. Flowers are a brilliant crimson, of a beautiful and distinct, clear shade, blooming more or less continuously through the Summer. It is dwarf habit in growth.

**W. floribunda** (Crimson Weigela). A June-flowering variety of tall growth. The flowers are small but numerous and a beautiful crimson. Grows to a height of 8 ft. and is desirable either as a specimen or in a group planting.



*Viburnum Dentatum*

The Higher Soar Their Summits, the Lowlier Droop Their Boughs



## Choose Your Shrubs for Purpose, Location and Condition



An Attractive Foundation Shrub Planting

## Shrub Classification

### NO. 1—SHRUBS FOR SUNNY EXPOSURE

Name	Planting Interval	Flower Color	Time of Bloom
<b>A. High Growing (Sunny Exposure)</b>			
Deutzia, Pride of Rochester.....	4-5'	White, pink tint	May
Bush-honeysuckle			
Lonicera fragrantissima.....	4-5'	Cream-white	April-May
Lonicera tatarica rosea.....	4-5'	Pink	May-June
Lonicera tatarica alba.....	4-5'	White	May-June
Lonicera tatarica sibirica.....	4-5'	Rose-pink	May-June
Common Lilacs.....	4-5'	White or purple	May
Philadelphus (Mockorange)			
coronarius.....	4-5'	White	May-June
grandiflorus.....	4-5'	Cream-white	June
Viburnum lantana.....	4-5'	White	May
Weigela candida.....	4-5'	White	June-Aug.
floribunda.....	4-5'	Crimson	June
Tamarix africana.....	4-5'	Bright pink	April-May
<b>B. Medium Height (Sunny Exposure)</b>			
Cornus mascula (Cornelian Cherry).....	3-4'	Bright yellow	April-May
Hydrangea arborescens grandiflora.....	3-4'	White	May-June
paniculata grandiflora.....	3-4'	White	Aug.-Sept.
Honeysuckle (Lonicera morrowi).....	4-5'	Cream-white	May-June
Philadelphus aureus (Golden Mockorange).....	3-4'	White	May-June
Privet (Ligustrum ibota).....	3-4'	White	June
Spiraea prunifolia.....	3-4'	White	May
vanhouttei.....	3-4'	White	May
froebeli.....	3-4'	Crimson	May
Symphoricarpos (Snowberry)			
racemosus.....	3-4'	Pink	June-July
<b>C. Low Growing (Sunny Exposure)</b>			
Barberry thunbergi, Japanese.....	2-3'	Coppery-red foliage	Autumn
Deutzia gracilis.....	2-3'	White	May
lemoinei.....	2-3'	White	June
Kerria (Corchorus) japonica.....	2 1/2-3 1/2'	Yellow	July-Oct.
Baby Rambler Roses in variety.....	2-2 1/2'	Selection	Summer
Spiraea Anthony Waterer.....	2-3'	Rose-crimson	June-Aug.
thunbergi.....	2-3'	White	May-June
callosa alba.....	2-3'	White	June-Aug.
Weigela Eva Rathke.....	4-5'	Crimson	June-July

### NO. 2—SHRUBS FOR SHADY EXPOSURE

<b>A. High Growing (Shady Exposure)</b>			
Viburnum dentatum.....	4-5'	White	June
opulus.....	4-5'	White	
Honeysuckle (Lonicera morrowi).....	4-5'	Cream-white	May-June
<b>B. Medium Height (Shady Exposure)</b>			
Hydrangea arborescens grandiflora.....	2 1/2-3 1/2'	White	May-June
Privet (Ligustrum ibota).....	2-3'	White	June
Roses, Hybrid, in variety.....	2 1/2-3'	Selection	Summer
Symphoricarpos chenaulti.....	3-4'	Coralberries	Fall
vulgaris.....	3-4'	Red berries	August
<b>C. Low Growing (Shady Exposure)</b>			
Barberry thunbergi.....	2-3'	Coppery-red foliage	Autumn
Viburnum opulus sterilis.....	2-2 1/2'	White	May-June

### HEDGES: SHRUBS MOST COMMONLY USED

#### Informal Lines—Not Clipped:

	Planting Interval
Barberry, Thunberg's.....	1-1 1/2'
Privets, in variety.....	8-12"
Mockorange, in variety.....	2-2 1/2'
Dwarf Spireas, in variety.....	1-1 1/2'
Spiraea vanhouttei.....	1 1/2-2'

#### Clipped—Formal Design:

Barberry, Thunberg's.....	12-15"
California Privet.....	8-12"
Amur Privet.....	8-12"
Regel's Privet.....	12-15"

### SHRUBS FOR BACK YARD OR BORDER PLANTING FOR SUNNY EXPOSURE

Name	Planting Interval	Flower Color	Time of Bloom
<b>A. High Growing (Sunny Exposure)</b>			
All shrubs in group No. 1-A			
Cornus alba.....	3 1/2-4'	Bark blood-red	in Winter, black berries
flaviramea.....	3 1/2-4'	Bark bright	yellow in Winter
mascula.....	3 1/2-4'	Bright yellow	May
stolonifera.....	3 1/2-4'	Red in Winter	
Euonymus europaeus.....	4-5'	Deep rose	June-July
Forsythia intermedia.....	4-5'	Golden	May
suspensa fortunei.....	4-5'	Golden	May-June
suspensa spectabilis.....	4-5'	Golden	May-June
Lilacs, in variety.....	4-5'		May-June
Sumacs (Rhus) canadensis.....	4-5'	Green-white	June
copallina.....	4-5'	Green-yellow	August
<b>B. Medium Height (Sunny Exposure)</b>			
All shrubs in group No. 1-B			
Buddleia (Butterflybush)			
magnifica.....	3-4'	Violet-rose	July-Sept.
Ile de France.....	3-4'	Violet-rose	July-Sept.
Deutzia lemoinei.....	2 1/2-3'	White	May-June
<b>C. Low Growing (Sunny Exposure)</b>			
All shrubs in group No. 1-C			
Clethra alnifolia.....	2 1/2-3'	White	July-Aug.
Forsythia suspensa.....	2 1/2-3 1/2'	Golden	May
All the dwarf Spireas.....		In variety	

### SHRUBS FOR SHADY EXPOSURE

<b>A. High Growing (Shady Exposure)</b>			
All plants in group 2-A			
Cornus in variety.....	3-5'		
Bush-honeysuckle as in Group 2-A.....			
Viburnum as in Group 2-A.....			
<b>B. Medium Height (Shady Exposure)</b>			
All plants as in group 1-B			
<b>C. Low Growing (Shady Exposure)</b>			
Clethra alnifolia.....	2-2 1/2'	White	July-Aug.
Viburnum opulus sterilis.....	2-2 1/2'	White	May-June

### CLIMBING AND GROUND-COVERING VINES AND SHRUBS

#### For Ground Covering:

	Planting Interval
A. Small Banks and terraces	
Barberry, Thunberg's.....	2 1/2-3'
Forsythia suspensa.....	3-4'
B. Large banks and terraces	
Ampelopsis in variety.....	4-5'
Bittersweet in variety.....	4-5'
Honeysuckles—Halliana, Sempervirens.....	4-5'
Matrimony-vine.....	5-6'
All in Group A (above).	

#### For Climbing:

Ampelopsis.....	6-10'
Bittersweet, in variety.....	6-10'
Clematis, in variety.....	6-10'
Honeysuckles, in variety.....	6-10'
Climbing Roses, in variety.....	6-8'
Wisterias, in variety.....	8-10'

Only Roses Which Have Successfully Passed the Rigid Tests of The American Rose Society are Offered by Greening—See Pages 39 to 42



# Greening's FINE ROSES

Greening's grow and offer in this catalog, only those fine old favorites and new varieties, the merits of which have been proven. Any variety known of inherent weakness and poor blooming quality has been discarded. Those varieties that are known to succumb to the ravages of insects and disease are eliminated.

We furnish to our customers only sturdy, two-year-old, No. 1 field-grown plants, semi-pruned for planting with canes paraffined for protection and packed to reach you in perfect planting condition.

## Hybrid Tea Roses

The outstanding merits of the Hybrid Tea Roses are that they combine an everblooming quality with hardiness and come in an extensive color range from the vivid brilliant colors to light pinks and pure white. They are by far the most important Roses grown today and no doubt, the most universally treasured of flowering plants. We list only those fine, old favorites and splendid new varieties which we have proved to have distinct merit, worthy of Greening name and guarantee.

The planting and cultural directions will be found on page 42.

**Ami Quinard.** One of the outstanding of the dark crimson Roses. Large, semi-double flowers of velvety scarlet. Tall, vigorous grower.

**Angele Pernet.** Recently introduced Rose of intense color. Buds of deep flaming orange opening to semi-double blooms of brilliant reddish apricot. Petals notched and frilled. Foliage glossy. One of the late novelty Roses.

**Autumn.** Beautiful, tall, crimson and yellow Rose with buds of burnt orange tinge. Opens to double flowers of deep pink and orange yellow. In warm weather flowers have a striped appearance which disappears in cool weather, leaving deep crimson and gold color. Moderately vigorous.

**Betty Uprichard.** Brilliant coppery, red buds, opening to deep toned carmine with coppery orange. Interior mostly a delicate salmon pink.

**Briarcliff.** Brilliantly colored sport of the famous Columbia with huge, pink flowers on large, long stems. Large, pointed buds. Spicily fragrant and long lasting.

**Caledonia.** Popular white Hybrid Tea with exceptionally long-pointed buds opening to double high centered, large, fragrant flowers. Continuous bloomer.

**Christopher Stone.** One of the newer varieties of Scarlet crimson, unsurpassed for intense fragrance.

**Condesa de Sastago.** Beautiful, double Rose with vivid colors of sparkling copper. Buds golden yellow, beautifully striped with red. Spicy, scented blooms.

**Dame Edith Helen.** Shapely in bud. Substantial, high centered blooms of clear pink. Sweetly scented. Blooms freely produced on long, strong stems. Vigorous grower.

**Duquesa de Penaranda.** A novelty variety producing two distinct types of flowers. During the Summer the pointed buds are a blend of apricot-orange and dark pink, opening to blooms of coppery-apricot. In Autumn great brownish buds open slowly to fine formed blooms of cinnamon-peach flower.

**Edel.** Bold, well built flowers of white with faintest ivory shading towards the base passing to pure white. Uniform, stout growing habit.

**Edith Nellie Perkins.** Rose of outstanding merit. Vigorous in growth and free blooming. Long-pointed buds; large, fragrant flowers, double type, outside petals are oriental red shading to a cerise-orange; inside salmon-pink.

**Editor McFarland.** A novelty Rose of sparkling pink borne of vigorous, upright bushes. Long stems particularly suited for cutting.

**Eldorado.** Golden buds suffused with red, opening to clear yellow; cupped blooms with crinkled petals. Erect grower.

**E. G. Hill.** A favorite Rose with beautiful long bud of perfect form and full, double, high centered flower of dazzling scarlet shading to deep red as it develops.

**Etoile de France.** One of the most charming of the Red Roses. Bright, clear red color shading to velvety crimson, long stems, vigorous foliage.

**Etoile de Hollande.** Brilliant red blooms of magnificent size. Beautiful in half-open state. Clean, attractive centers; large petals, very fragrant.

**General MacArthur.** Beautiful, bright, scarlet, large, full, sweet-scented blooms. Buds borne on long, stout stems. Ideal Rose for cutting purposes.

**Golden Dawn.** Fine garden Rose. Flowers show double, deep yellow in bud, occasionally tinged with bronze. Opens to fine, fragrant, pale yellow flowers of large size and lasting quality. Plants are semi-dwarf and spreading with dark, glossy, green foliage.

**Golden Emblem.** Large, perfectly formed buds of brilliant yellow striped with crimson on outer petals. Dark golden-yellow blooms.

**Gruss an Teplitz.** A favorite vivid, cherry red shading to a velvety crimson. Very fragrant. Free, strong grower and profuse bloomer.

**Hadley.** Excellent cutting Rose with flowers of rich, crimson, velvety texture. Sweetly scented.

**Heinrich Gaede.** Beautiful late introduction. Color rosy-copper with brilliant orange tones which hold until petals drop. Buds extra large of good form borne singly on large, long stems.

**Heinrich Wendland.** Reddish-copper double flowers with orange flush over all. Has rich, fragrant odor. Shiny, leathery foliage.

**Joanna Hill.** A novelty Rose of bright yellow and cream-colored blooms. Buds large and long pointed. Semi-double flowers; lasting quality. Stems long and stiff, excellent for cutting.

**Jonkheer J. L. Mock.** Standard, well known, heavy blooming Rose with carmine buds of large size. Opens slowly to deep, carmine-pink blooms with inner surface of silvery rose. Stems strong. Bush vigorous and healthy.

**Julien Potin.** Another novelty, golden-yellow Rose. Vigorous, erect habit with shapely, medium to large blooms and long pointed form. Free flowering and fragrant.

**Kaiserin Auguste Viktoria.** Pearly white variety tinted with lemon center. Large, full, double blooms of perfect form. Introduced years ago and still a favorite in its class. In great demand.

**Killarney Pink.** Blooms are flesh color suffused with pale pink and delightful blend. Very fragrant, buds grow on long, strong stems making it valuable for cutting.

**Killarney White.** Duplicate of the Pink Killarney, but with blooms as white as snow.

**Lady Alice Stanley.** A Rose that is perfect in form, color, size, freedom of bloom and fragrance. When fully developed its color is a beautiful shade of coral rose. Inside of petals shading to flesh-pink with deeper flushes.

**Lady Margaret Stewart.** Gorgeous rose, long high center. Buds of orange-yellow. Vivid and splashed with scarlet. Back of petals streaked with orange and carmine.

**Lady Hillingdon.** Coppery shade of apricot-yellow. Beautiful in bud. Free bloomer.

**Los Angeles.** Flame-pink springing from golden base. Long buds opening slowly to beautifully formed blooms. Flowers freely. Stems long and ideal for cutting.

**Lucie Marie.** Apricot yellow suffused with coppery-red; strong grower and good bloomer.

Flowers and Trees are Living Things and Speak an Universal Language





Ami Quinard

**Luxembourg.** Flowers deep orange, strong, vigorous grower, buds are long, on stiff stems. Fine for cut flowers.

**McGredy's Scarlet.** Glowing rose of rather dark scarlet. One of the best of the new varieties. Buds extra long pointed and borne on long stems. Opens to double blooms.

**Margaret McGredy.** An extraordinary scarlet-orange and brick-red flower. Cup-shaped, double symmetrical blooms. Sturdy grower. Delightfully fragrant.

**Max Krause.** One of the newer novelty Roses. Has globular buds of deep butter-orange. Opens to huge double, golden yellow flowers. Petals paling at edges and deepening to soft, coppery tones in center of bloom.

**Mme. Butterfly.** Flowers light pink suffused with golden-apricot near base of petals. Erect stems. Delightfully fragrant.

**Mme. C. Chambard.** Coral pink with peach tint, long pointed buds, very fragrant.

**Mme. Ed. Herriot.** Buds of coral-red, shaded with yellow at base. Open blooms of medium size, semi-double, of superb coral-red shaded with yellow and bright rosy scarlet.



Pres. Herbert Hoover

Let Greenings Give You a Selection and Planting to Produce a Succession of Beauty Through the Four Seasons



Dame Edith Helen

**Mme. Jules Bouche.** One of the best everblooming Roses ever introduced. Flowers large, double; splendid form. White with pink base. Vigorous grower.

**Mme. Nicholas Aussel.** Copper-red with long, shapely, tapering buds, developing into large, fragrant, full double flowers of opalescent salmon-pink.

**Mevrouw G. A. Van Rossem.** Stunning bright orange and red Rose of erect habit. Small, dense foliage, medium size, globular blooms of golden-yellow, flamed with orange and scarlet. Deepens at times to bronze and brown.

**Mrs. E. P. Thom.** Splendid medium yellow garden Rose with slender, shapely, golden-yellow buds. Large, symmetrical blooms of light canary-yellow. Erect and vigorous.

**Mrs. Henry Bowles.** Vigorous, free, flowering Rose with ovoid buds and globular flowers of clear, piercing pink. Fine, firm center. Fragrant.

**Mrs. Henry Morse.** Beautiful, bright flower of two contrasting tones of pink with underlying yellow glow. High centered, double bloom. Moderately fragrant. One of the best of the new improved pink Roses.

**Mrs. Lovell Swisher.** Large pointed buds, huge, gorgeous blooms of salmon-pink and gold. Vigorous grower, free bloomer; one of the largest Roses.

**Mrs. P. S. Du Pont.** One of the newer golden-yellow Roses of beautiful form. Plant is compact and leafy. Blooms with increasing abundance throughout season.

**Mrs. Sam McGredy.** Beautiful, scarlet-coppery, orange rose, heavily blushed with red on the outside of the petals; rich and dazzling in effect.

**Pres. Herbert Hoover.** One of the most popular of the standard, wellknown, everblooming Roses. The Long



Soeur Therese



Editor McFarland



Duquesa de Penaranda

pointed buds are borne upright on long, strong stems. The inner side of the outer petals is dark pink. The reverse side is orange, outlined with red. Center petals shaded salmon and apricot. Grows with exceptional vigor and produces an unbroken succession of handsome flowers.

**Radiance.** One of the most popular of all American Roses. Blooms all Summer; cup-shaped blooms of clear pink borne on long, upright stems.

**Red Radiance.** Like the Radiance in bud and bloom but is of lovely cherry-red. Especially good during late Autumn.





Mrs. Henry Morse



McGredy's Scarlet



Condesa de Sastago



Christopher Stone



Red Radiance

**Rev. F. Page-Roberts.** Long buds varying in color from deep, coppery pink to orange and red. Opens to pure, golden yellow on the inside and streaked on the outside with copper and red. Somewhat dwarf in growth, but producing flowers on long stems.

**Roslyn.** A charming Rose with golden-yellow buds. Opens to frilled blooms of buttercup hue. Tinged with orange, remarkably free blooming. One of the most interesting of the newer varieties.

**Sir David Davis.** A scarlet Rose of brilliant color and profuse bloomer.

**Sir Henry Segrave.** Long, high-centered buds of lemon yellow, opening to large, full, double blooms. Vigorous grower.

**Souv. de Claudius Pernet.** Beautiful yellow buds that retain their exquisite shade as they open into full blooms. Plant erect and vigorous.

**Souv. de Georges Pernet.** Brick red buds opening to orange-pink. Exceptionally large, fragrant blooms.

**Soeur Therese** (Sister Therese). Gorgeous, long-pointed buds of chrome-yellow, heavily marked with carmine. Opens to rich Daffodil-yellow and holds its color well. Sweetbrier fragrance.

**Sunburst.** Fine, well-shaped, yellow flowers, suffused with orange center; well known, fragrant garden Rose.

**Talisman.** One of the most popular varieties. Brilliant red and golden buds that open into beautifully shaped flowers of scarlet-orange and golden yellow. Vigorous, tall, and blooms constantly. Thrives everywhere. Credited in the list of No. 1 Roses by American Rose Annual. Has received the most widespread praise.

**Ville de Paris.** Round buds of clear yellow and large, globular flowers of same hue. Untouched by any other color. Considered one of the best of pure yellow Roses.

## CLIMBING ROSES

### American Beauty Climber.

One of the most popular of Climbing Roses. Blooms freely. Strong, healthy, vigorous grower, frequently making shoots from 10 to 12 ft. long. Flowers are medium to large in size for Climbing Roses. Pleasing rose-pink color.

**Dr. Van Fleet.** This Rose, because of its dainty color and exquisitely shaped buds and flowers, appeals to all. The long, pointed buds are of flesh pink borne on stems 12 to 18 in. long. Splendid for cutting.

**Paul's Scarlet Climber.** This new, hardy Climber was originated in England. Incomparable in brilliancy of color which is a vivid scarlet maintained without burning or bleaching until the petals drop. Flowers are medium size, semi-double; very freely produced in clusters of from three to six each on large, branched canes, the plants being literally covered with flowers from top to bottom. It is strong, perfectly hardy, and has been awarded the Gold Medal by the National Rose Society of England; also the much coveted Gold Medal of the Bagatelle Gardens in Paris, France. Most highly recommended by the English horticultural press and the American Rose Society.

**Silver Moon.** A Climber different from all other Climbing Roses with beautiful semi-double flowers measuring  $4\frac{1}{2}$  in. or over in diameter. Pure white in color. Petals of great substance. Beautifully cupped forming a Clematis-like flower. Its boundless vigor makes it invaluable where quick shade is desired.



Paul's Scarlet Climber

Nature Has Given Us Colors—Use Them in Shrubs and Trees for Beautifying Your Home



## *Greening's Hardy* **HYBRID PERPETUAL ROSES**

Standard, well known varieties blooming in late Spring and in Autumn.

**Frau Karl Druschki.** Known as White American Beauty. The buds are pinkish opening to magnificent snow-white blooms with deep, firm petals. Flowers unsurpassed in shape. Considered the best white Rose of any class. Vigorous, strong, hardy. Bush grows 4 to 6 ft. high. Should be pruned frequently to bloom freely.

**General Jacqueminot.** Everybody who loves Roses places this sort high in the list of extra desirable kinds. Of bright crimson and sweet fragrance, it is assured a place in every worth-while collection.

**Ulrich Brunner.** A beautiful Rose of brilliant, scarlet, crimson. Old variety, one of the best known in cultivation. Well known everywhere. Very fragrant.

## **Polyantha, or Baby Ramblers**

For beds of mass color, borders, or low, colorful hedges, bush Polyantha or Baby Rambler Roses are most desired. We have selected what the Rosarians consider the best sorts certain to give satisfaction.

**Gloria Mundi.** A startling, colorful variety in any Rose garden. Produces huge clusters of small, orange, scarlet flowers of a deeper tone than Golden Salmon.

**Golden Salmon.** Vigorous growing, bushy Polyantha Rose, producing bright orange-salmon flowers in huge clusters. Makes an exceptional display in masses.



Baby Rambler Roses

**Ideal.** Polyantha that blooms constantly. Plant grows vigorously, long branching, produces dense, compact bunches of small, dark scarlet flowers shaded with black; borne in profusion. A splendid Rose for mass planting, of a velvety color all season.

## **ROSE CULTURE • *Planting and Pruning Care***

The culture of Roses does not differ materially from that of most other decorative plants. They enjoy the best soil they can be given. They need an abundance of water but the ground must not be soggy. They like plenty of fresh air and regular feeding.

**Soil**—The ground should be deeply prepared for Roses; 2 feet is sufficient, but deeper is better. Manure or garden compost should be worked liberally into the soil. Preparation need not be carried to extravagant lengths, for Roses will tolerate ordinary conditions, but generally they deteriorate after several seasons if the ground has not been deeply and thoroughly prepared for them.

Cow manure is the best of all fertilizers but other animal manures may be freely used if cow manure is not obtainable. Commercial fertilizers give excellent results if used in connection with compost, peat, or other vegetable matter.

**Planting**—Roses may be planted at any time when they are dormant. In Northern climates, Fall-planted Roses should be heavily protected through the ensuing Winter. Spring planting is successful everywhere.

The best plants are 2-year-old, field-grown, budded stock. They should be cut back sharply at planting time, taking away at least two-thirds of their tops.

The secrets of successful Rose planting are: to do it early; to keep the roots from drying out while they are being handled, and to tramp the ground very firmly around the plant to make the roots firm in the soil. If the weather is likely to turn cold or hot, or dry, or windy, it is wise to hill earth up as high as possible about the plants and leave it there until the new growth appears.

**Care Through the Seasons**—Keep the Rose beds cultivated at all times. Water when the weather is dry, soaking the ground deeply and cultivating the surface as soon as it dries.

Where the Winters are severe, Climbers should be taken down from their supports in late Autumn, and the canes gathered into a bundle, laid on the ground and covered with earth, leaves, or some other protection. Hybrid Teas should be hilled up as high as possible and the tops covered with leaves, evergreen boughs, or some material which will not pack into a wet, soggy mass.

**Pruning**—When the covering is removed in the Spring, cut out all diseased and dead wood first, making clean cuts and leaving no stubs. Then shorten the remaining canes, remembering that the more wood there is left on the plants, the more flowers will be produced but the less perfect they will be.

The time to prune Ramblers is immediately after flowering. All old canes which have borne flowers should be removed at the base of the plant, and the strong, new shoots appearing from the ground or bottom of the old stems should be trained up to take their places. Ramblers always produce the best flowers on wood which is only one year old.

Large-flowered climbers should be left unpruned, but old, worn-out or disease-ridden stems may be removed. Obstrep-erous, dangling ends and unwanted canes may be removed at any time, but the best flowers are usually borne on the older wood.

**Protective Measures**—Beginning as soon as the foliage begins to unfold, precaution should be taken against the diseases which beset Rose foliage. The most effective material is dusting sulphur. The formula is 9 parts dusting sulphur and 1 part finely divided arsenate of lead. This dust applied frequently and thoroughly, will protect the Roses against leaf diseases and the attacks of chewing insects.

Aphids or plant lice which gather at the ends of the shoots and on the young buds and leaves, may be destroyed by a solution of nicotine-sulphate, or pyrethrum extract. Both materials are available at supply stores under various trade names.

The sulphur arsenate-of-lead dust should be applied to the Rose plants lightly but thoroughly, covering both surfaces of the leaves. It is best to do it when the air is still and the foliage is dry; late afternoon is generally an ideal time. If the sulphur dust is objectionable, common Bordeaux mixture applied as a spray is effective and there are other good proprietary products on the market which do not spot the foliage so badly. Protective dusting or spraying should be done often enough throughout the growing season to prevent enemies from getting a foothold and to keep the plants clean, healthy and vigorous.

**To Large Assignments or Small—Greening Give the Same Care**



# Greening's FLOWERING TREES

## CERCIS - Redbud

**Cercis canadensis** (American Redbud). The hardiest and perhaps the finest species of a hard some group of early and profuse flowering trees. Medium height, 20 to 30 ft. forming a broad, irregular head, of glossy, heart-shaped leaves that color pure yellow in Fall. It blooms in earliest Spring with Dogwoods and Magnolias, and is valuable for grouping with them. Its masses of small, delicate rosy purple flowers wreath the leafless branches so thickly as to give very fine contrasts and cheery Spring effects. Must be transplanted when small.

## CORNUS - Dogwood

**Cornus florida** (Flowering Dogwood). The great white flowers are 3 in. or more in width, lasting in favorable weather for as many weeks. Besides the fine characteristics given above, the bright red bark on its young growth makes it attractive and cheery in Winter. Tree rarely grows over 20 ft. in height and is branching in habit. Blooms when small. Rather hard to transplant with success.

**C. florida rubra** (Redflowering Dogwood). A variety producing flowers suffused with bright red. Blooms when quite young. One of the finest flowering trees.

## CRATÆGUS

### (Flowering Thorn)

The low, dense, neat habit of the thorns adapts them for planting in small yards and in groupings anywhere. Are very hardy and grow well in all dry soils. The foliage is varied, always attractive, handsome and almost evergreen in some cases; the flowers are showy and abundant, often quite fragrant; the fruits are retained long in some species, are so thick as to burden the branches and frequently of bright color. Their foliage colors brilliantly in Fall.

**Crataegus coccinea** (Thicket Hawthorn). Fine native variety, blooms in May producing white blossoms, succeeded by scarlet foliage.

**C. cordata** (Washington Hawthorn). Blooms May and June. Fruits September and October. A very desirable species with beautiful Fall coloring and clusters of bright red fruit remaining a long time on the branches. Excellent for hedges.

**C. crus-galli** (Cockspur Thorn). A dwarf tree rarely over 20 ft. high, with widely extending horizontal branches, giving it a flat-topped effect. The leaves are thick, glossy, coloring with tinge of red, opening in May. Fruits showy scarlet, persistent until Spring.

**C. mollis** (Downy Hawthorn). Bright green leaves, showy flowers and scarlet fruit.

**C. oxyacantha florepleno** (White Doubleflowering Hawthorn). Double creamy white flowers followed by scarlet red berries. Leaves deeply cut and very striking as a small lawn tree.

**C. oxyacantha splendens** (Paul's Double Scarlet Hawthorn). A tree of unusually fine habit, rich, luxuriant foliage; flowers very double, in great profusion of deep crimson color with scarlet shade almost completely covering the entire foliage bearing area.

## HALESIA

### Silverbell or Snowdrop Tree

**Halesia tetraptera** (Silverbell, Snowdrop Tree). A valued tree for its handsome, drooping, bell-shaped white flowers in early Spring. Thrives in any well drained soil. Grows to about 20 ft.

## MAGNOLIA

**Magnolia soulangeana**. A handsome tree of dense growth. Large, cup-shaped flowers of deep rose pink shading to silvery pink. Flowers appear before the foliage and when in bloom, the tree is literally covered with these handsome, Tulip-like flowers.

## MALUS - Flowering Crab

**Malus atrosanguinea** (Carmine Crab). Much like *Floribunda*, but with brilliant carmine flowers and bronze-purple foliage.

**M. coronarius** (Wild Sweet Crab). Flowering in June, with showy flowers resembling a wild Rose followed by showy Apple-like fruits.

**M. floribunda** (Japanese Flowering Crab). Small tree, producing a profusion of single flowers in May. The flowers are a beautiful carmine in bud when open, followed by very ornamental fruit in Autumn.

**M. ioensis plena** (Bechtel Flowering Crab). A low, bushy tree, rarely over 20 ft. in height. It is the most beautiful of all the fine varieties of Flowering Crabs. At a distance the tree seems to be covered with dainty little Roses of a delicate pink color. It is very fragrant.



Magnolia Soulangeana

"Poems are Made by Fools Like Me—But Only God Can Make a Tree"





Flowering Crab Trees (*Malus floribunda*) (See page 43)



Paul's Scarlet Hawthorn (*Crataegus*) (See page 43)

See Page 46 for  
Greening Free Landscaping Service

### MALUS - Flowering Crab—Continued

**M. niedzwetzkyana** (Redvein Crab). Early. A Russian Turkestan species, remarkable for the red color of the flower, branches, leaves and fruit.

**M. sargentii** (Sargent's Crab). Very dwarf spreading variety. Pale straw color flowers with bright yellow anthers; scarlet fruit hanging until Spring.

### PRUNUS

#### Flowering Plum

**Prunus triloba flore-pleno** (Doubleflowering Plum). A charming small tree 3 to 5 ft. high, of spreading, vigorous growth. Very early in Spring before the leaves appear, the whole tree is decked in a fleecy cloud of very double, light pink blossoms. Its effect on a still lifeless landscape is very bright.

**P. cerasifera Newport** (Purpleleaf Plum). A distinct and handsome little tree, rarely over 20 ft. high, covered with a mass of small white single flowers in Spring, later with showy pinkish-purple leaves that deepen in color to the end of the season. It is a unique and beautiful ornament to the lawn.



White Flowering Dogwood



Redbud (*Cercis*) (See page 43)

The Beauty of a Properly Planted Place Does Not Cease when the Snows Come





Karl Rosenfield



Festiva Maxima

## Greening's PEONIES—The Garden Favorite

As a garden favorite, Peonies retain their popularity through the generations. Their gorgeous, handsome flowers in numerous variations, types and colors, excite the interest of all. Their culture is comparatively simple. Sunny positions are preferred in a not too heavy soil—dug deep and enriched. The roots should be planted so that topmost buds are about 2 inches below surface. Too deep planting results in loss of bloom. Plants should not be disturbed after planting as the blossom will increase in number, size and quality each year producing 10 or 12 years without division.

On the listing below of varieties each carries the rating of the American Peony Society based upon—10, for excellence in vigor, size of bloom, etc.

- 9.0 **Baroness Schroeder** (Kelway, 1889). Considered one of the finest. When the buds first appear they are a delicate pink, opening to mostly white. The blooms have an extraordinarily lasting quality making this an exceptional desirable variety for garden decoration and cut flowers. Very fragrant and blossoms in mid-season.
- 8.1 **Duchesse de Nemours** (Calot, 1856). A very early, fragrant, creamy white Peony of excellent quality. Moderately full center of light canary-yellow, deepening to pale green at the base of the petals. Regarded for its profuse production of blooms and lasting quality.
- 9.3 **Festiva Maxima** (Mieliez, 1851). A paperwhite Peony with crimson markings in the center. Very large blooms of full rose type; grows tall, strong, blossoming early in season.
- 7.6 **Edulis Superba** (Lemoine, 1924). Dark pink of even color; large, loose, flat crown when fully open. Very fragrant, early bloomer. Upright growth.
- 8.4 **Felix Crousse** (Crousse, 1881). Very brilliant red variety blossoms medium to large, globular and typical bomb shape. Very fragrant, strong growth. Blooms in midseason.
- 8.8 **Karl Rosenfield** (Rosenfield, 1908). An old favorite variety of clear, bright, crimson color, excellent form. Large flowers, globular, semi-rose type shape. Extremely vigorous grower, tall and free-flowering. One of the best early red varieties.
- 8.4 **L'Etincelante** (Dessert, 1905). A semi-double Peony, sometimes single in appearance with petals of deep rose, inner petals pale rose, white at edge. Golden crest of stamens. Large, striking blooms. Midseason.
- 8.9 **Marie Crousse** (Crousse, 1882). The nearest to salmon pink in Peonies. Lovely variety with tall stems and beautifully formed flowers of charming shade. Blooms in midseason.
- 8.8 **Mons. Martin Cahuzac**. One of the darkest Peonies known, of dark purple-garnet color. Medium size, globular, semi-rose type flowers. Tall, vigorous grower, free bloomer in midseason.
- 9.2 **Mons. Jules Elie** (Crousse, 1888). A large, very popular, beautiful Peony producing immense, self-colored, flesh-pink blooms, shading a trifle deeper toward the base of the petal. The guard petals are broad, surrounding the ball-like center of incurved petals. One of the largest, handsomest and most lasting cutting sorts.
- 8.6 **Mikado** (Japan, 1893). One of the best of the Japanese varieties, first shown at the Chicago World's Fair in 1893 by the Japanese Government. Rich red with long, rounded petals of brilliant red surrounding great dome of golden stamens. Exceedingly brilliant. Blooms in midseason.
- 8.6 **Primevere** (Calot, 1861). Exquisite, beautiful Peony with guard petals of deep creamy yellow, center petals of sulphur yellow. If not exposed to the full sun, the flowers will hold a canary yellow which is most attractive. Blooms in midseason.
- 9.0 **Sarah Bernhardt** (Lemoine, 1906). A very popular sort for cut flowers and exhibition flowers. Color is a beautiful Apple blossom pink, petals silver tipped. Large flowers on strong stems of medium height. Very free blooming, agreeably fragrant; late season.
- 9.8 **Therese** (Dessert, 1910). Most desirable variety of a charming shade of violet-rose changing to a lilac white. Develops a high crown; strong grower and very free bloomer. One of the best of the midseason sorts. Splendid form and texture.



## From the Smallest Homes to the Largest Estates

### *Greening's* **LANDSCAPE SERVICE** *is Famous*

FOR nearly one hundred years, Greening's Big Nurseries have been serving America. The hundreds of acres comprising the Greening Nurseries with complete plan service, have provided skilled landscaping for thousands of small 5-room homes on the small city lot, as well as numerous suburban acres and country estates. No landscaping project has been too small—none is too large, for the extensive Greening organization.

Your property is well worth the advice of skilled landscaping counsel. It has been demonstrated countless times that fine landscaping adds to the property value, not only at the time it is done, but through the years as the landscaping grows to greater beauty and appearance.



Don't plant "mistakes"—plan your planting with the help of these experts—Greening Landscape Professionals, for permanent and growing satisfaction.

## LANDSCAPE WITH GUARANTEED NURSERY STOCK!

For five generations the Greening family has been growing fine nursery stock for America's home owners. The extent of our landscaping service makes it imperative that we have only the finest plants and trees—since there is no reason for carefully planned planting unless the plants used are the best obtainable.

In our nurseries we have even developed the special machines required for the proper cultivation and care of growing stock and all of our nurserymen are men of

long experience and skill in growing fine stock—whether it is for the huge estate, spending \$75,000, or the small home spending \$20.

Under this special offer you can enjoy the benefit of the experience gained in generations of specialization in this field—at no extra cost. Plan well, is the first essential to beautifying your property, then plant the best for complete satisfaction and greatest economy! Plant guaranteed stock from "Greening's."



## Simple, Easy Mail Method


Follow the simple instructions on the Greening Information Blank, providing for a rough sketch and actual measurements of your property, as illustrated at the left. With this information, our Landscaping Department prepares a carefully designed, accurately scaled, colored individual plan of your property showing what to plant, where to plant it, for best effect and most successful growth.

Does your home require shading from the sun? . . . do you need shrubs that will grow in a shaded location? . . . is there a building you wish screened off with natural-appearing planting? . . . this plan will provide for all of these conditions.

Your plan will give you a properly-balanced foundation planting that blends with the style of your home. It will give you a plan for a backyard that you can "live-in" Summer afternoons and evenings, as richly furnished in landscape material as your furnishings decorate the interior of your home, and your planned planting will enhance the value of your property through the years. To obtain this extraordinary service, without obligation, you simply write to us for Landscaping Information Blank and details of this Free Service.

While Greening Practice Has Surrendered to Modern Progress, the Ideal and Tradition of the Founders Survive





# *The* GREENING NURSERY COMPANY

BORN 1850... STILL GROWING

1500 ACRES

THE LARGEST GROWERS OF TREES IN THE WORLD

MONROE, MICHIGAN

Written in our 99th Year

Dear Friend:

It gives us great pleasure to send you our latest catalog. The facts which make Greening Nursery stock so outstandingly different are presented to you in this book.

Our catalog will give you a brief history of Greening's nearly 100 Years of nursery experience--how four generations of Greenings have carried out and improved the ideals of the founder.

They tell you how Greening's pioneered "Bud-Selection", recognized now by horticultural authorities everywhere, is an essential factor in fruit tree propagation for assurance of profitable production. For the fruit grower it marks a route to bigger, certain and more consistent fruit profits. Greening's "Bud-Selection" enables you to obtain "Thoroughbred, Pedigreed" nursery stock.

By our system of "Bud-Selection" drones and "Boarder" trees, are eliminated. "True-to-name" is not enough to insure dependable fruit stock. Greening's "Bud-Selection" is the answer to bigger crops, better color, earlier bearing and more uniform ripening.

In a wide choice of varieties, we offer you trees grown under the most scientific conditions, with big whole root systems, inbred with vitality and hardiness, assuring satisfaction when transplanted in your orchard.

Whether you plant acres of orchard, a few fruit trees for home orchard, a garden of small fruits, roses, shade trees, or ornamental stock, plant only "Certified" stock. By so doing, you assure yourself that the expense of years of care will not be wasted.

We urge you to order now and avoid disappointment. When stocks which have been reserved for any one season are sold, there are no more "Bud-Selected" trees available until another season.

Anticipating the pleasure of serving you, we are

Sincerely yours,

THE GREENING NURSERY COMPANY







# The GREENING NURSERY COMPANY

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THE LARGEST GROWERS OF TREES IN THE WORLD

MONROE, MICHIGAN

## TO OUR MICHIGAN CUSTOMERS

At the special session of the Michigan Legislature last July, amendments to the Sales Tax Act were passed affecting the purchase of agricultural and horticultural products.

Beginning September 1st, 1948, any purchaser of horticultural products claiming exemption from the Michigan Sales Tax, must be engaged in the raising of horticultural products as a business and must sign the exemption certificate below.

All ornamental purchases are subject to tax.

PLEASE NOTE: If you are ordering fruit trees or small fruit plants, and are claiming exemption from the Michigan Sales Tax, please sign this certificate and return it with your order.

This applies only to Michigan customers.

-----

### CERTIFICATE UNDER AGRICULTURAL PRODUCING EXEMPTION

The undersigned hereby certifies that all items, except as indicated hereon, are purchased for use or consumption in connection with the production of horticultural or agricultural products as a business enterprise and agrees to reimburse the seller the sales tax if used or consumed otherwise.

DATE \_\_\_\_\_ SIGNED \_\_\_\_\_  
(Purchaser)

ADDRESS \_\_\_\_\_

Illegal use of this certificate subjects persons to the penalties of the Sales Tax Act.







From

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Genuine Registered Pedigreed Fruit Trees  
Grown From Known Parentage  
Shade Trees—Shrubs—Vines  
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Roses



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The State of Michigan Certifies to the  
Quality of Greening Stock

\* In addition to the curb on the Virus Diseases by Greening in Bud-Selection as explained on page 3 of this catalog, the State of Michigan certifies too, that the propagation of Greening stone fruit is from Virus Free budwood and from careful inspection is apparently free from dangerous insects and dangerously contagious fruit diseases. This proof plus the experience of thousands of successful commercial fruit growers with Greening trees merits your confidence in the trees that you buy.



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STATE DEPARTMENT OF AGRICULTURE  
BUREAU ORCHARD & NURSERY INSPECTION  
BUDWOOD CERTIFICATION CERTIFICATE  
No. 2

THIS IS TO CERTIFY that the Stone Fruit Stock of The Greening Co., Monroe  
(Peach and Cherry Stock)  
has been propagated from virus disease free budwood, and is apparently free from  
dangerous insects and dangerously contagious fruit diseases.

Date of Inspection 7-26 1943  
Fee Paid \$ 2.00  
This certificate to be void after September 15, 1944  
Lansing, Michigan 11-12 1943

NOTE—Change of date or mutilation in any way of this certificate renders it null and void.

CHAS. FIGY  
Commissioner  
Director Bureau Orchard and Nursery Inspection



# Plant "Bud-Selected" Trees for Profit

The State of  
Michigan Certifies  
Greening Stock

See Page 47

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Quality in All Fruits

See Pages 2 and 3

The Leading  
Varieties of  
Each Kind  
of Fruit

See Pages 4 to 18

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Born 1850  
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